DOCUMENT RESUME

ED 348 909 HE 025 730

TITLE	Helping Adults Learn. Facilitator's Guide.
INSTITUTION	California State Univ. and Colleges, Long Beach. Office of the Chancellor.
SPONS AGENCY	Kellogg Foundation, Battle Creek, Mich.
PUB DATE	89
NOTE	172p.; This document is part of a collection produced under the auspices of the California State University Institute for Teaching and Learning. The CSU/ITL, created in 1988, facilitates a 20-campus systemwide network of faculty affiliates in response to the demand for improved teaching and learning in the college classroom. For related documents, see HE 025 729-732.
AVAILABLE FROM	CSU Academic Publications Program, 400 Golden Shore, Suite 132, Long Beach, CA 90802 ($55.00 for complete set).
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Academic Achievement; Access to Education; Adult Development; Adult Education; *Adult Educators; Adult Learning; Adult Programs; *Adult Students; Ancillary School Services; Higher Education; Nontraditional Students; Teacher Role; Teacher Workshops
IDENTIFIERS	*California State University Inst for Teach Learn; *College Teaching and Learning Collection

ABSTRACT

This publication is a guide for those planning and facilitating a "Helping Adults Learn" Workshop designed to assist higher education faculty and staff in promoting greater access and success for adult learners in higher education. An overview of the workshop describes the purpose, goals (to increase understanding of theory and research on adult learning, to assess the impact on adults of current institutional services and programs, to promote improved services and programs for adult learners) and objectives. An opening section discusses the role of the facilitator including responsibilities, materials, and planning tips. The workshop consists of four modules, each with its own section of the guide and covering: an introduction and overview; (2) characteristics of the adult learner; (3) facilitating adult learning success: designing programs; (4) facilitating adult learner success: designing instruction; and (5) facilitating the next steps: the needed resources. Each section outlines that section's objectives and suggests activities including worksheets for individual and small group activities. Appendix A contains sample agendas for a 6.5-hour format or an 8-hour format. Appendix B contains 14 overhead transparency masters. Appendix C contains four articles presented in the workbook for participants. Appendix D offers California State University references, and appendix E contains bibliographies totaling approximately 120 items for modules 2, 3, and 4. (JB)

Helping Adults Learn

Facilitator's Guide

THE CALIFORNIA STATE UNIVERSITY

CENTER FOR INNOVATIVE PROGRAMS

HE 025 730

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
California State
University
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

CSU Institute for Teaching and Learning
and
ERIC Clearinghouse on Higher Education

The California State University Institute for Teaching and Learning (CSU/ITL) facilitates a 20-campus network of teaching and learning programs in the CSU system. ERIC/HE has entered into an agreement with CSU/ITL to process documents produced by the system and create a mini-collection within the ERIC database.

Major objectives of this initiative are as follows:

- increase awareness of the work of the CSU Institute for Teaching and Learning;
- increase access to the work of CSU/ITL affiliates;
- begin to build a subset of information on teaching and learning that supports *The National Teaching and Learning Forum (NTLF)*, ERIC/HE's newsletter;
- encourage use of the ERIC system by CSU/ITL member affiliates and the *NTLF* readership; and
- test a model for collaboration between ERIC/HE and a major higher education system.

All CSU/ITL ERIC RIE citations are tagged with the following identifiers appearing in the IDEN:Field:

- College Teaching and Learning Collection; and
- California State University for Teaching and Learning.

All CSU/ITL citations carry the following statement in the Note Field:

> This document is part of a collection produced under the auspices of the California State University Institute for Teaching and Learning. The CSU/ITL, created in 1988, facilitates a 20-campus systemwide network of faculty affiliates in response to the demand for improved teaching and learning in the college classroom.

Helping Adults Learn

Facilitator's Guide

THE CALIFORNIA STATE UNIVERSITY
CENTER FOR INNOVATIVE PROGRAMS

Produced under a grant from the W.K. Kellogg Foundation
by The California State University, Center for Innovative Programs.

Published 1989 by The California State University, Center for Innovative
Programs. Printed in the United States of America.

Distributed by:
Institute for Teaching and Learning
California State University
400 Golden Shore
Long Beach, California 90802

Any reference to or use of this document must include the following statement:

Produced under a grant from the W. K. Kellogg Foundation.
Designed and desktop published by The California State University,
Center for Innovative Programs. 1989

Other Products from the Center for Innovative Programs

The Adult Learner in Higher Education: A Resource and Planning Guide

Strategies for Instructional Development: A Resource and Planning Guide

Profiles in Adult Learning: Videotape Series

- *Transitions* -- William Bridges
- *Reconfiguring the Workforce* -- Morris Keeton
- *Mainstreaming* -- Carol Aslanian
- *Learning Is Where You Find It: A New Instructional Bandwidth* --- Dee Brock
- *Critical Thinking* --- Stephen Brookfield
- *Facilitating Adult Learning Encounters* -- Stephen Brookfield
- *First Impressions Last: An Educational Ecology* -- Arthur Chickering
- *Corporate Education* -- Nell Eurich
- *Legal Access: Who Speaks for Adult Learners?* -- Michael Goldstein
- *Theory Applied: New Contexts for Experiential Learning* -- Leah Harvey
- *Empowering Learners Through Leadership* - George Pruitt
- *Working Smarter: The Full Wisdom of Experience* -- Barry Sheckley
- *Accreditation: Alliances for Quality* -- Patricia Thrash

Introduction

Background

The adult as a goal-directed learner has rapidly become an impetus for change in institutions of higher education. Nationally, the indicators of change extend from proposed programs for full-time adult students, to individual colleges and universities that offer curricula and instructional activities that are responsive to the needs of adults who live and work in a changing society. A major challenge for educators in the foreseeable future is to accommodate traditional educational patterns to the requirements of the adult learner.

This workshop has been designed to engage faculty and staff in activities that could ultimately promote greater access and success for adult learners within higher education. The goals and objectives of the workshop are outlined on the following page. Sample agendas for the workshop may be found in Appendix A.

How to Use this Guide

This Guide has been created to provide you with the necessary resources and assistance to conduct the workshop. It includes all material included in the participant workbook and integrates it with special facilitator guidelines in a module-by-module format.

This Guide contains all of the information you should need to conduct the workshop. Excerpts from the Participant Workbook are reproduced on the left hand side in each module, while corresponding instructor notes are outlined on the right. A set of transparency masters and supplemental resources are included at the end of the Guide to assist in the presentations.

While the ideas presented in this Workshop are relevant to any faculty or staff member who works with adult learners, special facilitator notes have been included for workshops administered exclusively to California State University(CSU) faculty and staff.

Overview of the Workshop

Goals

The workshop is designed to stimulate interest on the part of the participants, both individually and collectively, to:

- Increase their knowledge and understanding of the theory and research related to adult learning.
- Assess the impact of current institutional services and programs on the access and success of adults.
- Promote needed changes in institutional services and academic programs to better serve adult learners.

Objectives

The workshop activities provide an opportunity for the participant to:

- Explore the views held by theorists and colleagues about adults as learners.
- Discover how institutional services and programs may be barriers to educational success as well as access for adults.
- Consider the implications of concepts such as systematic instructional design, teaching style, and characteristics of effective instructors when planning instruction for adult learners.
- Plan with campus colleagues the next steps to improve instruction and academic support services for adult learners.

Table of Contents

The Role of the Facilitator .... **xi**
Responsibilities xi
Materials You Will Need xii
Before the Workshop Begins xiii

Module 1: Welcome, Introduction, and Overview **2**
Participant Objectives (p. 1) 2
Facilitator Objectives 3
Welcome Participants 3
Small Group Activity (p. 1) 4
Individual Activity 4
Small Group Activity (Facilitator Notes) 5
Individual Activity (Facilitator Notes 5

Module 2: The Adult Learner: Characteristics and Concerns **6**
Participant Objectives (p. 3) 6
Presentation 6
Facilitator Objectives 7
Presentation (Facilitator Notes) 7
Group Activity (p. 4) 10
Presentation (Slide 2.1) 10
Presentation (Slide 2.1) and Group Activity (Facilitator Notes) 11
Presentation (Slide 2.2) 14
Presentation (Slide 2.2) (Facilitator Notes) 15
Group Activity (p. 5) 16
Planning Ahead 16
Group Activity (Facilitator Notes) 17
Planning Ahead (Facilitator Notes) 17

Module 3: Facilitating the Access and Success of Adult Learners: Designing Programs 18
  Participant Objectives (p. 17) 18
  Presentation (Slides 3.1 - 3.6, pp. 17-18) 18
  Facilitator Objectives (p. 17) 19
  Presentation (Slide 3.1) (Facilitator Notes) 19
  Presentation (Slide 3.2) (Facilitator Notes) 21
  Presentation (Slide 3.3) (Facilitator Notes) 21
  Presentation (Slide 3.4) (Facilitator Notes) 23
  Presentation (Slide 3.5) (Facilitator Notes) 23
  Individual Activity (p. 19) 24
  Presentation (Slide 3.6) (Facilitator Notes) 25
  Individual Activity (Facilitator Notes) 25
  Small Group Activity (pp. 19-20) 26
  Small Group Activity (Facilitator Notes) 27
  Planning Ahead (p. 20) 28
  Planning Ahead (Facilitator Notes) 29

Module 4: Facilitating Adult Learning: Designing Instruction 30
  Participant Objectives (p. 29) 30
  Presentation (Slide 4.1, p. 28) 30
  Facilitator Objectives 31
  Presentation (Slide 4.1) (Facilitator Notes) 31
  Individual Activity (p. 30) 34
  Small Group Activity 34
  Individual Activity (Facilitator Notes) 35
  Small Group Activity (Facilitator Notes) 35
  Presentation (Slide 4.2, p. 31) 36
  Individual Activity 36
  Presentation (Slide 4.2) (Facilitator Notes) 37
  Individual Activity (Facilitator Notes) 37
  Small Group Activity (p. 31) 38
  Presentation (Slide 4.3, p. 32) 38
  Small Group Activity (Facilitator Notes) 39
  Presentation (Slide 4.3) (Facilitator Notes) 39
  Presentation (Slide 4.4, p. 32) 40
  Small Group Activity (p. 32) 40
  Presentation (Slide 4.4) (Facilitator Notes) 41
  Small Group Activity (Facilitator Notes) 41
  Presentation (Slide 4.5) 42
  Presentation (Slide 4.6) 42
  Presentation (Slide 4.5) (Facilitator Notes) 43
  Presentation (Slide 4.6) (Facilitator Notes) 43
  Individual Activity (p. 33) 46
  Planning Ahead (p. 34) 46
  Individual Activity (Facilitator Notes) 47
  Planning Ahead (Facilitator Notes) 47

Module 5: Facilitating the Next Steps: The Resources Needed 48
- Participant Objectives (p. 45) 48
- Individual Activity 48
- Facilitator Objectives 49
- Individual Activity (Facilitator Notes) 49
- Small Group Activity (p. 46) 50
- Individual Activity 50
- Small Group Activity (Facilitator Notes) 51
- Individual Activity (Facilitator Notes) 51
- Workshop Wrap-up 51

Appendix A: Sample Agendas 53
- 6 1/2 Hour Workshop 55
- 8 Hour Workshop 57

Appendix B: Overhead Transparency Masters 59
- Slide 2.1: Dimensions of Learner Diversity
- Slide 2.2: Assumptions About the Adult Learner
- Slide 3.1: Barriers Confronting Re-Entry Students
- Slide 3.2: Factors Affecting Completion Rate
- Slide 3.3: Components of Program Design
- Slide 3.4: Types of Entry Services
- Slide 3.5: Types of Ongoing Services
- Slide 3.6: Types of Exit Services
- Slide 4.1: The Process of Designing Instruction
- Slide 4.2: Techniques for Writing Objectives
- Slide 4.3: Instructional Methods for Adult Learners
- Slide 4.4: Assessment Methods for Adult Learners
- Slide 4.5: Teaching Style
- Slide 4.6: Exemplary Instructors of Adult Learners

Appendix C: Articles Included in the Workbook 89
- The Adult as Learner: A Case for Making Higher Education More Responsive to the Individual Learner 91
- Summary: Facilitating Access and Success 101
- Adapting the University to Adult Students: A Developmental Perspective 103
- A Challenge 109
- Guide with Objectives that Take a Student's Perspective 111
- Essential Skills for the Facilitator of Adult Learning 115

Appendix D: CSU References 119

Appendix E: Bibliography 169
- Module 2 171
- Module 3 172
- Module 4 176

The Role of the Facilitator

Responsibilities

The facilitator is the key to the success of the Helping Adults Learn Workshop. It is important that the conduct of the workshop reflects the principles of adult learning embodied in the workshop.

The primary responsibilities of the facilitator are to stimulate interest in the content and present it in such a way that participants can quickly see the situational applications of the concepts as they work or interact with adult learners.

Another responsibility of the facilitator is to guide the learning process during the course of the workshop. The following actions enable the facilitator to make learning come to life in a relevant, meaningful, and insightful way:

Set the conditions for learning.

Establish immediately (at the beginning of the workshop) that participants are expected to contribute actively and fully to the learning process. Call upon their experiences and knowledge and encourage them to share with other participants.

Set the mode and the pace.

Establish immediately a participative, two-way mode (as opposed to the one-way "I teach, you learn" mode) and set a lively, energetic pace.

Begin by creating opportunities for the participants to contribute. You can then react to participants' ideas, rather than vice versa.

Remember, at the beginning of the workshop, it is more important for participants to **feel** right than to **be** right.

Ensure that participants understand what they are experiencing and see ways it will benefit them.

Use questioning and feedback techniques to help assure understanding. If an open atmosphere has been established in the beginning, participants -pants will volunteer information and should not need frequent prompting.

Lead group discussions.

Keep group discussions on track so that they are productive and satisfying.

Avoid lecture.

A rule-of-thumb: in an informal workshop such as this one, avoid unbroken presentations of longer than five minutes. Remember that learning is not a "spectator sport."

Encourage participation by asking for reactions, comments, experiences. If a relaxed, participative climate has been established, getting participants to contribute should not be a problem.

Materials You Will Need

- Participant Workbooks (one per participant)
- Overhead Slide set
- Videotape "Helping Adults Learn" This program consists of four 10-minute segments draw from the Profiles in Adult Learning Series, and is intended for use with longer workshops (8 hours or more):

    1. *Working Smarter: The Full Wisdom of Experience* -- Barry Sheckley
    2. *Transitions* -- William Bridges
    3. *First Impressions Last: An Educational Ecology* -- Arthur Chickering
    4. *Facilitating Adult Learning Encounters* -- Stephen Brookfield

- Supplemental Publications

    Hodgkinson, Harold L. (1985) *All one system: Demographics of education -- from kindergarten through graduate school* The Institute for Educational Leadership. 1001 Connecticut Avenue, N.W., Suite 310, Washington DC 20036.

For CSU Workshops

Assembly Office of Research, State of California.(June 1986) *California 2000: A people in transition*. Joint Publications Office, State Capitol, Box 942849, Sacramento, CA 94249-0001

Hodgkinson, Harold L. (1986) *California: The state and its educational system*. The Institute for Educational Leadership. 1001 Connecticut Avenue, N.W., Suite 310, Washington DC 20036.

Before the Workshop Begins

The following are preparations you should make before the workshop begins:

- Participants will be interacting frequently in small groups. The room arrangement should facilitate this type of activity.
- Preview the videotape "Helping Adults Learn" to familiarize yourself with the content and organization of the program.
- Be sure that video equipment is in working order and that it is the correct machine for your tape.
- Be sure that the overhead projector is in working order.
- Walk through the room to see if all participants can clearly see the overhead screen and video monitor.
- Have a few extra pens or pencils ready.
- If your presentation style includes using flipcharts, chalkboard, blank transparencies, etc., be sure the supplies you need are ready.
- Distribute Workbooks around the room to indicate where you'd like participants to sit.

Welcome, Introduction, and Overview

module 1

Participant Objectives (p. 1)

In this part of the workshop, you will have the opportunity to:

- Meet your fellow workshop participants and workshop facilitator(s).
- Review the workshop objectives and schedule.
- Determine how your expectations of the workshop fit into the agenda.
- Consider your institution's response to the adult learner.

Facilitator Objectives

- To learn about participants' backgrounds and experiences.
- To assure participants that their knowledge and experiences are valuable assets and needed to maximize workshop effectiveness.
- To discover participants' expectations of the workshop; i.e., to learn why they are attending and what they hope to gain from it.
- To familiarize the group with the goals, objectives, and overall content of the workshop.
- To demonstrate that participants are expected to participate individually and in groups.

Welcome Participants

1. Introduce yourself and any guests or observers.
2. Give name of workshop and review goals and objectives.
3. Discuss workshop logistics (phones, restrooms, messages, etc.). Be sure participants understand that they are free to get up, get coffee, etc., during the workshop.
4. Explain that this is a participative workshop and that participation can begin with brief introductions.

NOTE: The first 30 minutes of a workshop are the most crucial. They set the mood and the tone for the remaining experience. If the facilitator talks at length (identifying goals, objectives, schedule, subject matter content, etc.) with no planned participant interaction, he/she may be conveying to the participants that they should play "Pupil" to their "Teacher."

Small **G**roup **A**ctivity (p. 1)

Your fellow participants

Individual **A**ctivity

After reviewing the goals and objectives in the workbook overview, what would you hope to gain from this workshop?

Small Group Activity (p. 1)

This exercise requires that participants share information about themselves in small groups.

1. Divide workshop into small groups. (Be sure that room has been arranged to allow for small group work.) Try to have no more than four groups altogether.

   NOTE: If the workshop is attended by nine or fewer participants, conduct this activity in one group. If attendance is ten or greater, divide the group into small groups of five to eight participants.

2. Ask each participant to briefly describe his/her background and experiences to the small group. Space for notes, if needed, is provided in Workbook.

3. Ask a few of the participants to tell you and the group-at-large who they are: the departments they are in, their connection with adult learners, experiences with adult learners, etc. This gives you an overview of the group, is helpful if some group members do not know each other, and gives the group an opportunity to participate early in the workshop.

Individual Activity

1. Ask participants to review the goals and objectives of the workshop and then enter in their Workbooks what they hope to gain from this experience. In other words, what are their individual objectives?

2. Ask volunteers to share with the group-at-large their expectations. The more information you as a facilitator have about the participants, the better you can address their specific needs.

   Relate, to the extent that you can, participant expectations to workshop content. If a participant expects something that is not included in workshop content, can it be incorporated into the workshop? Can it be met in another way?

   If an expectation is not realistic in terms of the workshop content, say so. Avoid disappointment and frustration by misleading participants.

3. Review Workshop Schedule as a means of introducing the subject matter to be covered in the workshop.

4. Assess the compatibility of: (1) what you know of participants' backgrounds and experiences, (2) their reasons for attending, and (3) the actual subject-matter content of the workshop.

The Adult Learner: Characteristics and Concerns module 2

Participant Objectives (p. 3)

In this part of the workshop, you will have the opportunity to:

- Consider demographic and societal changes that contribute to an increased need for educational opportunities for adults.
- Consider your perceptions of adult learners from the standpoint of diversity.
- Identify modifications you could make based on a discussion of adult learner diversity.

Presentation

Who Adult Learners Are

Unlike the traditional full-time student, for whom the educational experience is their major preoccupation, the adult learner must juggle a variety of roles and demands simultaneously.

Numerous attempts have been made to develop a workable definition of the "adult learner." Some educational theorists differentiate adult learners from other individuals by chronological age (e.g., all students over 23, 25, or some other age). Others see developmental state, cognitive complexity, learning goals, or degree of self-direction as the distinguishing characteristic rater than age. A rather common definition focuses on the complex social roles of the adult learner who is typically a spouse, parent, employee, and community member in addition to being a student. For example, Arthur Chickering, for the National Commission on Higher Education and the Adult Learner, defines "adult learner" as an individual whose major role in life is something other than full-time student.

Nationally, approximately 50% of students enrolled in institutions of higher education are over 25.

Hodgkinson, 1985

Module 2

Facilitator Objectives

- Help participants recognize their perceptions or misperceptions of adult learners, and develop a consensual definition of the adult learner based on current research.
- Present demographic information that will enable participants to appreciate the increasing involvement of adults in higher education.
- Stimulate participant analysis of current institutional practices that show higher education's response to the adult learner.

Presentation

1. Give participants five minutes to read the section "Who Adult Learners Are"on page 3 of their workbook.
2. Ask for reactions to Chickering's definition of the adult learner (i.e., "an individual whose major life role is something other than full-time student"). If you accept this definition, what does it say about the pace and/or approach adult learners might take in pursuing an academic credential?
3. **Optional**. Play the first segment of the videotape "Helping Adults Learn". Discuss the major points presented by Sheckley.
4. Reinforce the statement by Hodgkinson (i.e., "nationally, 50% of the students enrolled in institutions of higher learning are over age 25"). Mention the source of the statement and show students the copy of Hodgkinson's report (*All One System,* included in Appendix D).
5. Ask participants to contribute reasons for these demographic changes. Write their suggestions on the flip chart or chalkboard. Be sure the following key points are addressed:
    - Rapid obsolescence of scientific knowledge
    - Shift from an industrial society to an information state
    - Recognition of the relationship between learning, earning, and employability.
6. Reinforce the need to begin developing support strategies and services to prepare for these demographic changes in the adult learner population.

Supplemental Information for CSU Participants

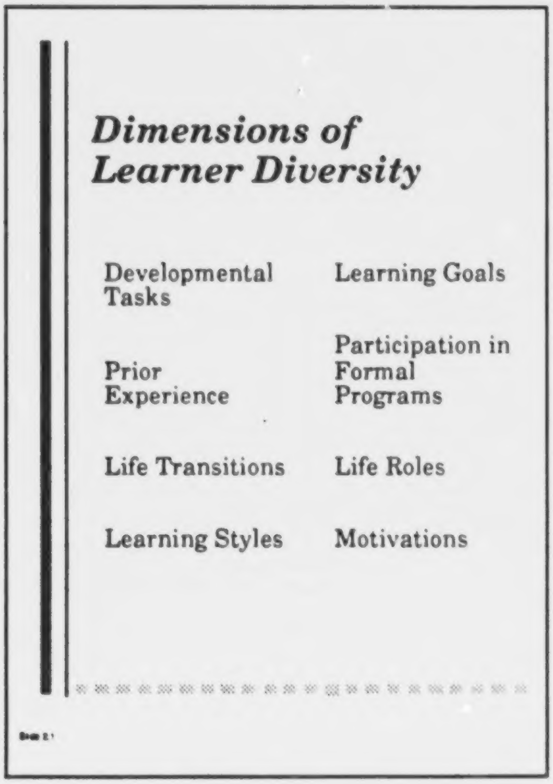
- The following are changing demographic trends in California (Source: *California 2000: A people in transition*, Assembly Office of Research, 1986)
  - By the year 2000, the majority of working adults will be minorities
  - Fastest growing segment of working adults is the least educated
  - Per capita, California ranks among the nation's four highest states participating in higher education
  - Percentage graduating from CSU is below national average (29% in 5 years versus 50% in 4 years)
  - More than 80% of Blacks and Hispanics pursuing postsecondary education enroll initially in community colleges
  - Transfer rates from community colleges to CSU are disproportionately low, particularly for minorities (16%)
- The following are student demographics in the CSU system (Source: 1987 study by Mason, W. and Fletcher, D. W. for the CSU Chancellor's Office Division of Research and Development)
  - 43% of total enrollment over age 25 (campuses range from 20% to 65%)
  - Majority of students over age 25 are women - increasingly enrolled in traditionally male disciplines
  - 52% of baccalaureate degrees are awarded to graduates over age 25
  - 98% of masters degrees are awarded to graduates over age 25
- In 1987, the *Master Plan Renewed* recognized that the older-part-time student has special needs. It entrusted the primary responsibility for serving these students to the California State University.
- The Commission on the Older, Part-Time Student has been formed to recommend specific actions that will ensure greater equity and access for these students. The Commission will, among other actions:
  - Review system program, policies, procedures, and structures.
  - Recommend system goals for greater access and improved services.
  - Recommend specific policies and procedures.

NOTE: Refer to the Mason and Fletcher publication in Appendix D for more information on CSU demographics.

Group Activity (p. 4)

Based on your experience, identify characteristics of adult learners in relation to the dimensions summarized in Slide 2.1.

Presentation (Slide 2.1, p. 4)



Dimensions of Learner Diversity

Developmental Tasks

Prior Experience

Life Transitions

Learning Styles

Learning Goals

Participation in Formal Programs

Life Roles

Motivations

Presentation (Slide 2.1: Dimensions of Adult Learner Diversity) and Group Activity (p. 4)

1. Show Overhead Slide 2.1.
2. Ask participants to describe their perception of adult learners in terms of the dimensions described on the Slide.
3. Participants may find it easier to describe adult learners by distinguishing between adult and childhood learners. Develop two columns on a flip chart or enamel board. Label one column "Childhood Learning Tendencies" and the other "Adult Learning Tendencies"

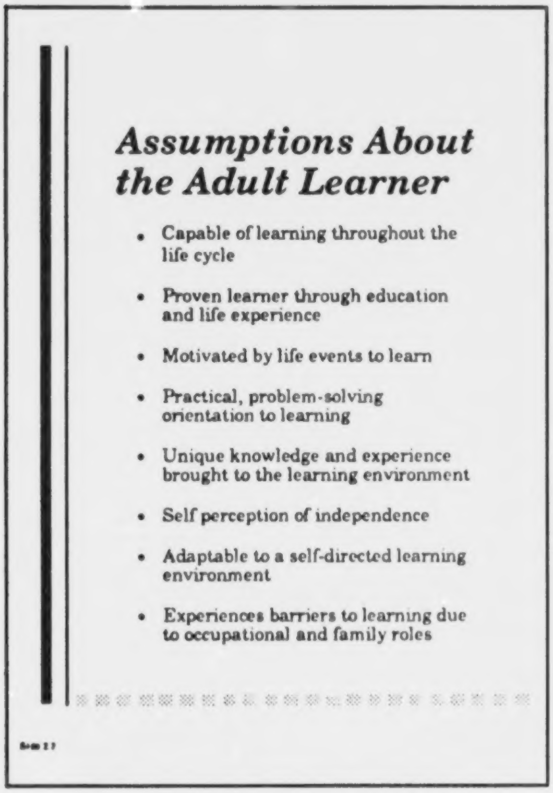
   List participant responses in the appropriate columns, making sure to explain that the categories represent opposite ends of a continuum rather than a distinct dichotomy, and that learners will vary in their placement along this continuum. Use the following chart as a key.

LEARNER TENDENCIES: CHILDHOOD VERSUS ADULTHOOD

Childhood	Adulthood
Children depend upon adults for material support, psychological support, and life management. They are other-directed.	Adults depend upon themselves for material support and life management. Although they must still meet many psychological needs through others, they are largely self-directed.
Children perceive one of their major roles in life to be that of learner.	Adults perceive themselves to be doers—using previous learning to achieve success as workers, parents, etc.
Children, to a large degree, learn what they are told to learn.	Adults learn best when they perceive the outcomes of the learning process as valuable—contributing to their own development, work success, etc.
Children view the established learning content as important because adults tell them it is important.	Adults often have very different ideas about what it is important to learn.
Children, as a group within educational settings, are much alike. They're approximately the same age, come from similar socioeconomic backgrounds, etc.	Adults are very different from each other. Adult learning groups are likely to be composed of persons of many different ages, backgrounds, educational levels, etc.
Children actually perceive time differently than older people do. Our perception of time changes as we age—time seems to pass more quickly as we get older.	Adults, in addition to perceiving time itself differently than children do, also are more concerned about the effective use of time.
Children have a limited experience base.	Adults have a broad, rich experience base to which to relate new learning.
Children generally learn quickly.	Adults, for the most part, learn more slowly than children, but they learn just as well. They also have the added advantage of superior judgment (wisdom, if you will).
Children are open to new information and will readily adjust their views.	Adults are much more likely to reject or explain away new information that contradicts their beliefs.
Children's readiness to learn is linked to both academic development and biological development.	Adults' readiness to learn is more directly linked to need—needs related to fulfilling their roles as workers, spouses, parents, etc., and to coping with life changes (divorce, death of a loved one, retirement, etc.).
Children learn (at least in part) because learning will be of use in the future.	Adults are more concerned about the immediate applicability of learning.
Children are often externally motivated (by the promise of good grades, praise from teachers and parents, etc.).	Adults are more often internally motivated (by the potential for feelings of worth, self-esteem, achievement, etc.).
Children have less-well-formed sets of expectations in terms of formal learning experiences. Their "filter" of past experiences is smaller than that of adults.	Adults have well-formed expectations, which, unfortunately, are sometimes negative because they are based upon unpleasant past formal learning experiences.

Reprinted by permission from The National Center for Research in Vocational Education. (1987). *Plan instruction for adults, Module N-4.* Columbus, OH: Ohio State University.

Presentation (Slide 2.2, p. 4)



Assumptions About the Adult Learner

- Capable of learning throughout the life cycle
- Proven learner through education and life experience
- Motivated by life events to learn
- Practical, problem-solving orientation to learning
- Unique knowledge and experience brought to the learning environment
- Self perception of independence
- Adaptable to a self-directed learning environment
- Experiences barriers to learning due to occupational and family roles

Presentation (Slide 2.2: Assumptions About the Adult Learner)

1. Show Overhead Slide 2.2. Ask participants if they have any questions regarding the assumptions listed.

2. Ask if there is general agreement on these assumptions. Acknowledge any dissenting points of view, and clarify if possible. Do not spend too much time debating specifics.

3. **Optional**. Play the second segment of the videotape "Helping Adults Learn". Discuss the major points presented by Bridges.

4. Remind participants to read Sheckley's article (located at the end of Module 2 of the Participant Workbook and in Appendix C of this Guide). Mention that this article provides a comprehensive overview of current research related to adult learner characteristics.

5. Remind participants of the Bibliography provided at the end of their Workbook. It includes several suggested references for further information on adult learner characteristics.

Group Activity (p.5)

Consider your own institution and identify ways in which higher education is responding to the adult learner.

Planning Ahead

Based on the discussion of diversity among adult learners, begin a list of changes you could make to improve your work with adult learners.

1.

2.

3.

4.

5.

Group Activity (p. 5)

1. Invite participants to share information with the larger group on the ways in which their own institution is responding or plans to respond to the adult learner. Encourage them to consider ways in which their institution is addressing:

   - access and progression issues
   - curricular needs
   - instructional needs

2. Encourage participants to meet with each other informally during the break to learn more about programs of interest.

3. Explain to participants that in the next module, they will begin considering options for adult learners related to access and related student services.

Planning Ahead

1. Introduce this exercise as one that will be repeated throughout the workshop. It will provide an opportunity for participants to record actions they might consider taking now and in the future to bring about changes that will facilitate access and success for adult learners.

2. Request that participants make at least one thoughtful entry. Emphasize that these will not be shared with the group. As individuals finish their entries they can begin a "stretch" break of about 10 minutes.

Facilitating the Access and Success of Adult Learners: Designing Programs

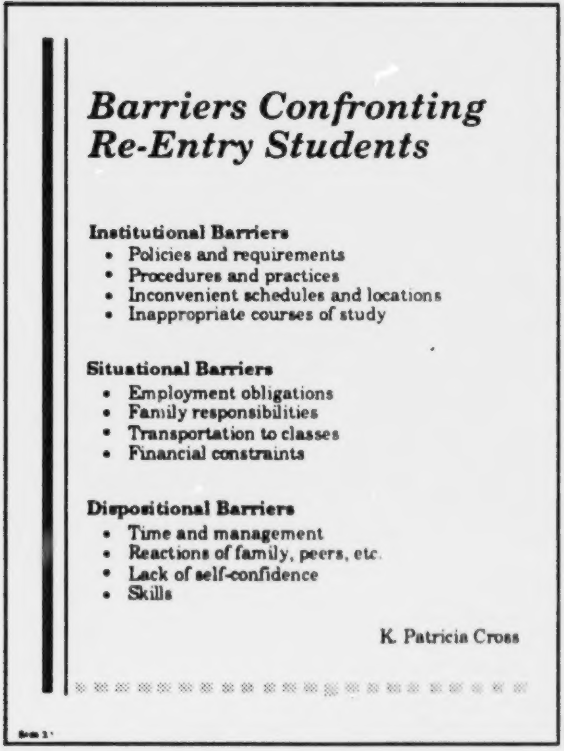
module 3

Participant Objectives (p. 17)

In this part of the workshop, you will have the opportunity to:

- Consider the relationship between program design and factors affecting retention and completion rates.
- Consider the impact of existing services on adults as learners.
- Conceptualize an ideal array of student services.
- Identify changes that might improve student services for adult learners in your institution.

Presentation (Slides 3.1 - 3.6, pp. 17-18)



Barriers Confronting Re-Entry Students

Institutional Barriers
- Policies and requirements
- Procedures and practices
- Inconvenient schedules and locations
- Inappropriate courses of study

Situational Barriers
- Employment obligations
- Family responsibilities
- Transportation to classes
- Financial constraints

Dispositional Barriers
- Time and management
- Reactions of family, peers, etc.
- Lack of self-confidence
- Skills

K. Patricia Cross

[illegible]

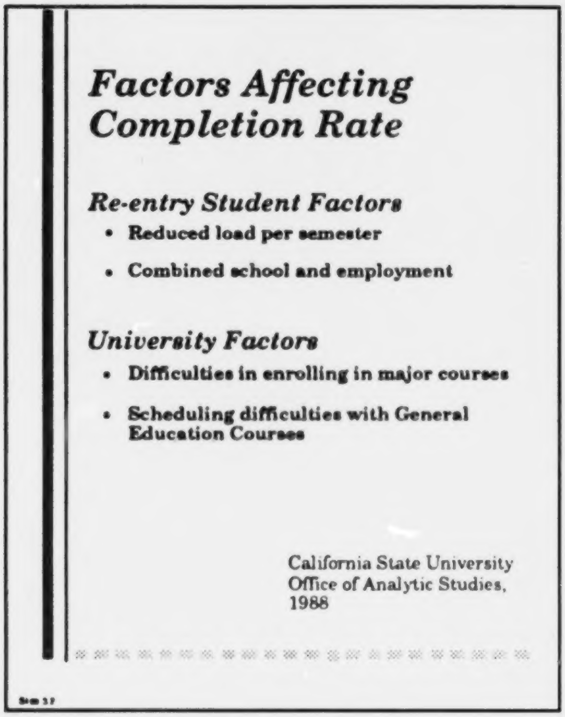
Module 3

Facilitator Objectives (p. 17)

- Help participants appreciate the barriers that adult learners experience upon returning to higher education.
- Increase participant awareness of the range of services and programs that are needed to facilitate adult learner access and success in higher education.
- Encourage participants to analyze student services currently provided at their own institution and suggest additions or changes that would better address adult learner needs.
- Provide an opportunity for participants to identify actions they could take to facilitate these changes.

Presentation (Slide 3.1: Barriers Confronting Re-Entry Students, p. 17)

1. Show Overhead Slide 3.1. Explain that adults typically confront numerous obstacles in returning to school which block access to higher education and success once admitted.
2. Ask participants to provide concrete examples of barriers in each category. For example, institutional barriers might be policies that limit or deny transfer of credit, policies that limit assessment options, or class scheduling.
3. "Summary: Facilitating Access and Success" describes these barriers in more detail for those interested in further exploration of this issue. (The reprint is included in Appendix C of this Guide.) Also, mention the work of K. Patricia Cross in this context.



Factors Affecting Completion Rate

Re-entry Student Factors

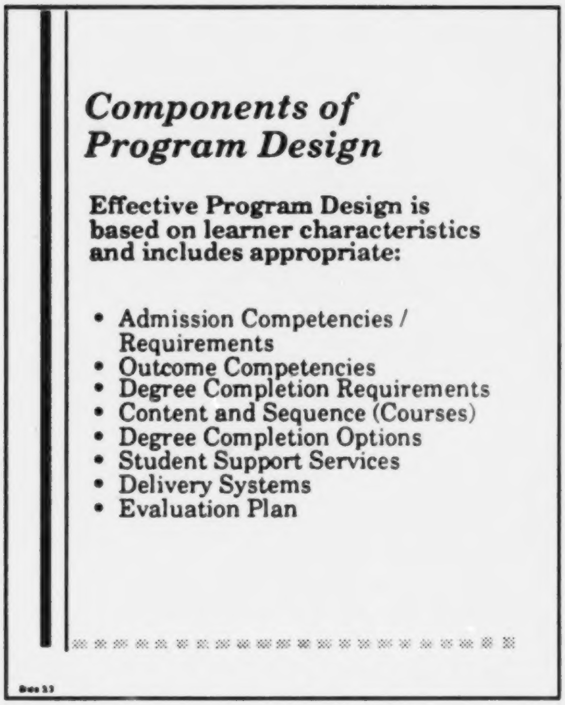
- **Reduced load per semester**
- **Combined school and employment**

University Factors

- **Difficulties in enrolling in major courses**
- **Scheduling difficulties with General Education Courses**

California State University
Office of Analytic Studies,
1988

Presentation (Slide 3.2, p. 17)



Components of Program Design

Effective Program Design is based on learner characteristics and includes appropriate:

- Admission Competencies / Requirements
- Outcome Competencies
- Degree Completion Requirements
- Content and Sequence (Courses)
- Degree Completion Options
- Student Support Services
- Delivery Systems
- Evaluation Plan

Presentation (Slide 3.3, p. 18)

Presentation (Slide 3.2: Factors Affecting Completion Rate, p. 17)

1. Mention that fewer and fewer students are completing their their degree programs in the prescribed four years. Current national averages are as follows:

   - only 50% complete within 4 years
   - about 60% complete in 6 years

2. Show Overhead Slide 3.2. The slide lists student and university factors affecting the length of time it takes a student to complete a degree program. (Source: *Factors Effecting Time to Degree*, a 1988 CSU study conducted by the Chancellor's Office Department of Analytic Studies.)

3. Emphasize that new attitudes, plans, and policies will be needed to assist these stop-outs when they return to higher education.

Supplemental Information for CSU Participants

- CSU completion is far below national norm (29% in 5 years)

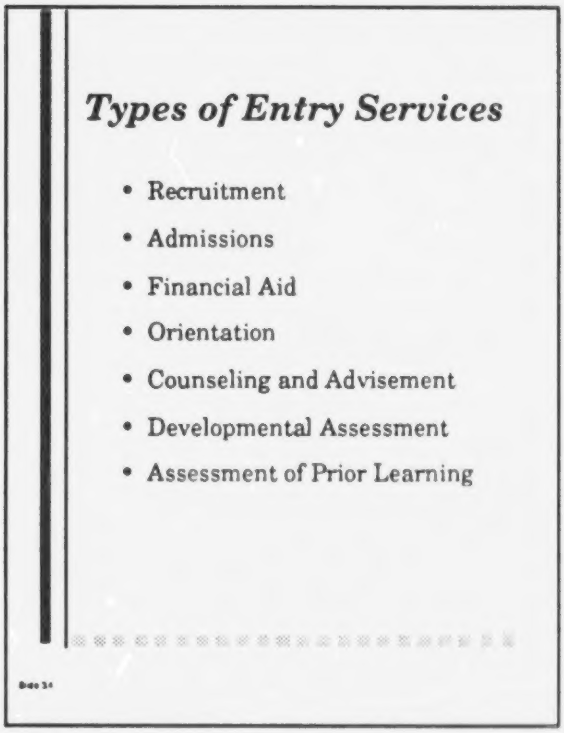
- Another 11-14% complete at a later date

Presentation (Slide 3.3: Components of Program Design, p. 18)

1. Show Slide 3.3. Discuss the following key points:

   - A systematic program development process is the key to insuring that the program meets the learner's needs and will facilitate access and success.

   - The process of program development hinges on knowing ***who*** the learners are.

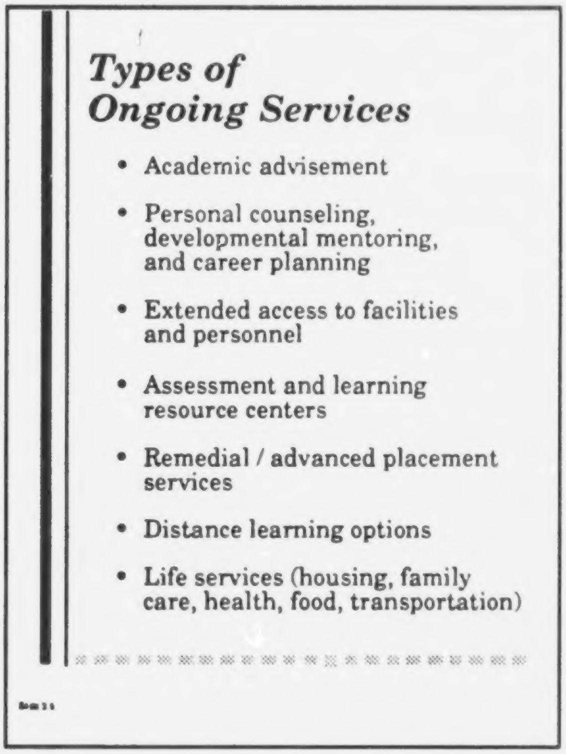


Types of Entry Services

- Recruitment
- Admissions
- Financial Aid
- Orientation
- Counseling and Advisement
- Developmental Assessment
- Assessment of Prior Learning

Slide 3.4

Presentation (Slide 3.4, p. 18)



Types of Ongoing Services

- Academic advisement
- Personal counseling, developmental mentoring, and career planning
- Extended access to facilities and personnel
- Assessment and learning resource centers
- Remedial / advanced placement services
- Distance learning options
- Life services (housing, family care, health, food, transportation)

Slide 3.5

Presentation (Slide 3.5)

Presentation (Slide 3.4: Types of Entry Services, p. 18)

1. Inform participants that the next three overheads identify three categories of student services:

   - Entry Services
   - Ongoing Services
   - Exit Services

   All three types of services are essential to an adult learner's access to and success in higher education.

2. Refer participants to the article by Ackell, which describes the configuration of these services in different institutional settings. The article has been reprinted in their workbook at the end of Module 3. (It is included in Appendix C of this Guide.)

3. Show Overhead Slide 3.4.

4. Ask participants to contribute examples from their own experience or imagination that illustrate the implementation of these services. For each example, ask the following questions:

   - How successful are they?
   - What special burden do they place on the institution?
   - What is the reward?

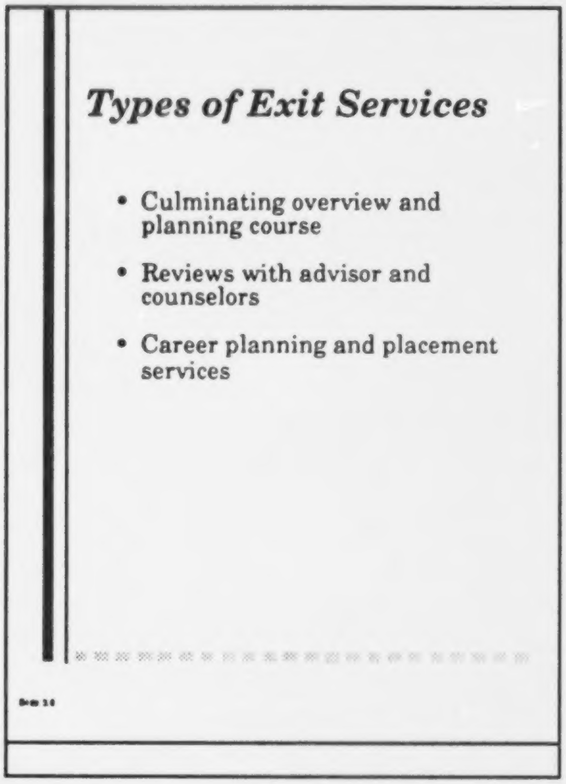
Presentation (Slide 3.5: Types of Ongoing Services, p. 18)

1. Show Overhead Slide 3.5.

2. Ask participants to contribute examples from their own experience or imagination that illustrate the implementation of these services. For each example, ask the following questions:

   - How successful are they?
   - What special burden do they place on the institution?
   - What is the reward?

Presentation (Slide 3.6, p. 18)



Types of Exit Services

- Culminating overview and planning course
- Reviews with advisor and counselors
- Career planning and placement services

Individual Activity (p. 19)

For the next 5 minutes use the following two columns to identify the policies and procedures for the institutional support services that you think help the adult learner and those that hinder the adult learner. You will then be asked to share your ideas with your small group.

Institutional Support Services That Help the Adult Learner	**Institutional Support Services That Hinder the Adult Learner**

Presentation (Slide 3.6: Types of Exit Services, p. 18)

1. Show Overhead Slide 3.6.

2. Ask participants to contribute examples from their own experience or imagination that illustrate the implementation of these services. For each example, ask the following questions:

    - How successful are they?
    - What special burden do they place on the institution?
    - What is the reward?

Optional. Conclude the overhead slide presentation by playing the third segment of the videotape "Helping Adults Learn." Discuss the major points presented by Chickering.

Individual Activity (p. 19)

1. Ask participants, using the columns provided in their workbook, to identify policies and procedures for institutional support services that they think help the adult learner, and those that hinder the adult learner.

2. Allow five minutes for this part of the activity.

Small **G**roup **A**ctivity (p. 19-20)

This Small Group Activity is divided into two parts.

Part I: Share your perceptions of the helpful and hindering aspects of institutional support services. Relate your discussion, when possible, to the characteristics of adult learners. Use the space below to record areas of concern.

Part II: Based on the concerns your group has just discussed, identify elements that would be found in the ideal array of student services -- those that would have the most positive impact on adult learners from entry services, ongoing services, and finally, culminating and exit services.

Each group will be asked to report back to the group-at-large.

Small Group Activity (pp. 19-20)

1. Point out to participants that there are two parts to this activity.
2. Divide workshop into small groups. They may be the same groups formed in Module 1 or different groups. Have each group select a spokesperson.

   NOTE: If the workshop is attended by nine or fewer participants, conduct this activity in one group. If attendance is ten or greater, divide the group into small groups of five to eight participants.

3. **Part I**: Ask members of each group to discuss and compare their ideas listed in the preceding "Individual Activity."
4. Ask them to relate their discussions, when possible, to the characteristics of adult learners.
5. **Part II**: Ask the groups to identify elements that would be found in the ideal array of student services--those that would have the most positive impact on adult learners from entry services, ongoing services, and finally, to culminating and exit services.
6. After 10 minutes, ask the spokesperson in each group to report back to the group-at-large.
7. Depending on the needs and experiences of the group, you might want to list their suggestions on a flip chart or enamel board. The list will help eliminate repeating responses and produces one list that represents the thinking of the total group.
8. Discuss as many of the suggestions given as time permits.

Planning Ahead (p. 20)

In the space below, begin a list that identifies possible actions you might consider taking now and in the future to bring about change in campus student services that would facilitate the access and success of adult learners.

1.

2.

3.

4.

5.

Planning Ahead (p. 20)

1. Before asking participants to complete this exercise, remind them that several references on student services are listed in the Bibliography.
2. Ask participants to begin a list that identifies possible actions they might consider taking now and in the future to bring about change in campus student services that would facilitate the access and success of adult learners.
3. Request that participants make at least one thoughtful entry. These will not be shared with the group. As individuals finish their entries they can begin a "stretch" break of about 10 minutes.

Facilitating Adult Learning: Designing Instruction

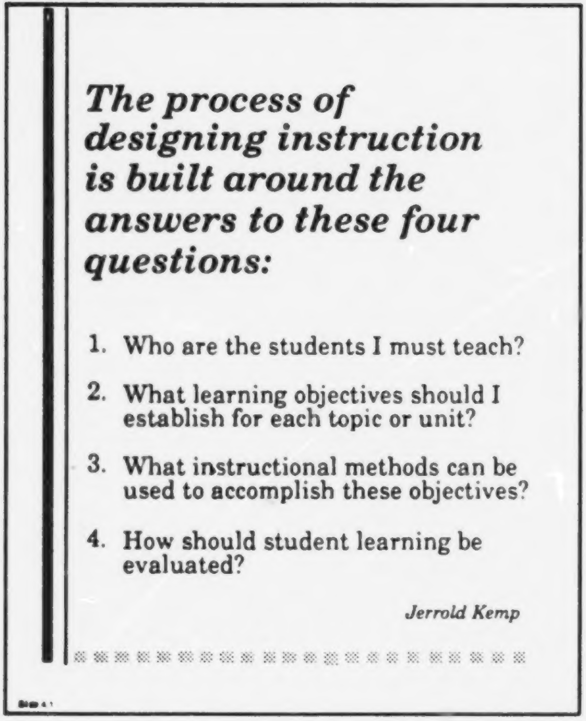
module 4

Participant Objectives (p. 29)

In this part of the workshop, you will have the opportunity to:

- Consider a systematic approach to designing instruction.
- Understand the importance of learning objectives to designing instruction for adults.
- Explore institutional methods and evaluation techniques appropriate for adult learners.

Presentation (Slide 4.1, p. 28)



The process of designing instruction is built around the answers to these four questions:

1. Who are the students I must teach?
2. What learning objectives should I establish for each topic or unit?
3. What instructional methods can be used to accomplish these objectives?
4. How should student learning be evaluated?

Jerrold Kemp

Facilitator Objectives

- Introduce participants to a systematic approach for assessing adult learner needs and designing instruction.
- Help participants appreciate the importance of learning objectives to designing instruction for adults.
- Increase participant awareness of the range of instructional methods and evaluation techniques appropriate for adult learners.

Presentation (Slide 4.1: The Process of Designing Instruction, p. 28)

1. Show Overhead Slide 4.1. Mention that the four questions listed on the Slide are from an article titled "A Challenge" by Jerrold Kemp, San Jose State University. The article has been included for later reading at the end of Module 4 in their workbook. (The article has been reproduced in Appendix C of this Guide.)

2. Emphasize that the process of instructional design is learner-centered.

3. Mention that the instructional design process is based on the following assumptions regarding the nature of learning and what constitutes effective instruction.

    - The content of an instructional program should be relevant to the performance requirements of the position or functions for which the course is preparing the learner.
    - A good instructional program should be efficient in terms of accomplishing its goals with a minimum of instructional resources (time, money, staff, facilities).
    - The most effective instructional programs are those which are based on explicit learning outcomes or objectives.

- Selection of any instructional strategy or medium should be based on learner characteristics and situational factors.

- A good instructional system should provide for empirical testing of the instruction, followed by revision or modification of those areas shown to be ineffective or irrelevant.

- There is a clear distinction between instructional content and instructional process.

- The applicability of this approach does not depend on subject matter, the length of the instructional program, or the complexity of the learning involved.

4. Review each step of the process to illustrate key points made thus far.

    - Step 1--know who the students are. Know their backgrounds and goals, for example. It is essential to start with who the learners are.

    - Step 2--Identify what they are to achieve by the end of the course.

      (Remember that adult learners will ask "What's in it for me?" and will want specific responses to assist in planning an academic program that will achieve their specific life goals.)

    - Step 3--There are many methods an instructor can use--lecture, panel discussion, debate, small-group problem solving, individual research, etc.

      The same objective may be achieved by using different methods for different learners. In fact, a variety of methods should be available to satisfy diverse learning styles.

    - Step 4--Evaluation should be based on the objectives identified in Step 2.

      Sometimes, instructors find it useful to think about evaluation before rigidly developing their objectives.

      Self-motivated adult learners will thrive when this approach to designing instruction is used.

5. Ask participants to provide examples of instructional planning from their own experience that illustrate the steps described above. How does their approach differ? What are the limitations of using this process?

Individual Activity (p. 30)

Think of one group of students you work with, preferably one that includes adult learners. Describe these students along such dimensions as motivation, past experience, learning styles, gender, ethnicity, age, etc.

Small Group Activity

Share your descriptions with others in your group, and add any new dimensions to your own list.

Individual Activity (p. 30)

1. Introduce this exercise by asking if any of the participants have worked with students who have exhibited varying degrees of interest and enthusiasm about their learning experiences. For example, some students will drop out, while others will attend sporadically, going through the motions. The rest will fully participate as though the course was of real value to them. Relate this to the concept of learning needs and readiness. Emphasize that most educators underestimate the impact that these differences have on the success of instruction.

2. Explain that this exercise is a variation on the activity they completed in Module 2. This time, instead of making general statements about adult learners as a whole, participants are asked to characterize a specific group of adult learners they work with. Emphasize that they are now assessing specific learner needs in preparation for further instructional design activities.

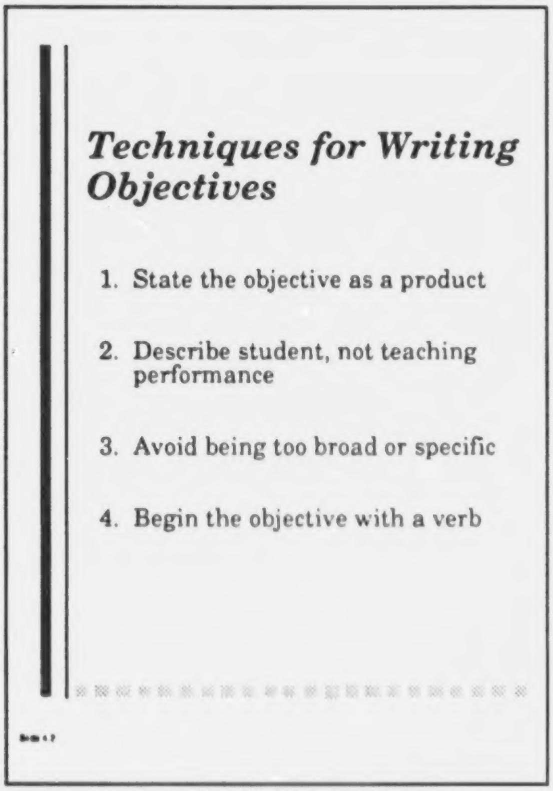
3. Allow 10 minutes for this activity.

Small Group Activity

1. Divide the participants into small groups, using the same criteria for group size described earlier. Encourage members within each group to refine their need descriptions based on the input of other group members.

2. If time permits, ask participants to share their descriptions with the larger group. Did their descriptions vary at all from the general characteristics of adult learners discussed in Module 2? What difficulties did they have in characterizing their group?

Presentation (Slide 4.2, p. 31)



Techniques for Writing Objectives

1. State the objective as a product
2. Describe student, not teaching performance
3. Avoid being too broad or specific
4. Begin the objective with a verb

Individual Activity

Write one objective for the group you identified in the previous exercise.

Presentation (Slide 4.2: Techniques for Writing Objectives, p. 31)

1. Introduce the subject of objectives by describing their importance to learner-centered instructional design. Mention that objectives are the foundation of instruction and give order, purpose, and structure to any course or lesson. Based on careful consideration of program goals and student needs, objectives provide the crucial link between an analysis of learner needs and instructional design. In addition they:

   - Clarify learning outcomes to both learners and instructional staff.
   - Provide a basis for selection of instructional content and methodology.
   - Ensure that instruction leads to professional competency.
   - Provide a standard for the evaluation of learner progress.
   - Provide a basis for instructional accountability.
   - Provide a reference for revision of instruction.

2. Briefly review the points on the slide.
3. Refer participants to the article by Dodge in their Workbook (It is included in Appendix C of this Guide.)

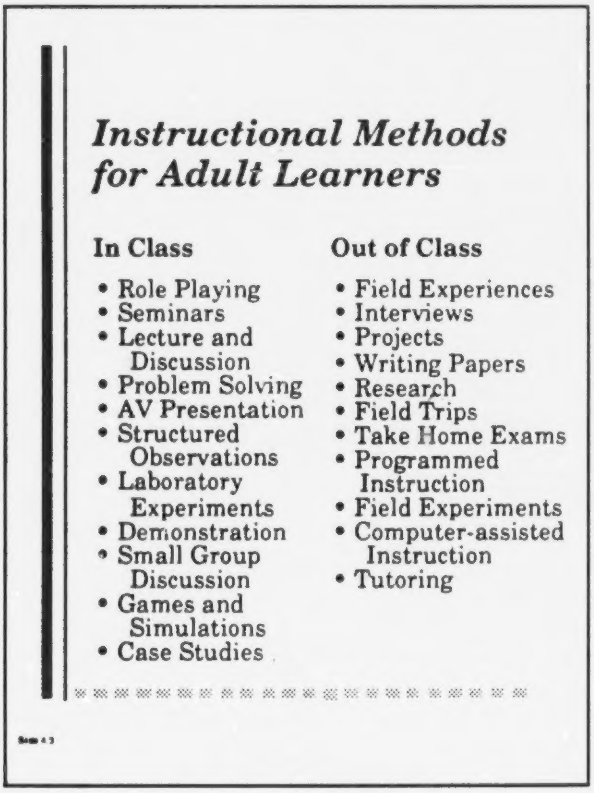
Individual Activity

1. While participants are still in their groups, ask them to individually formulate one objective that addresses the group they described in the previous activity.
2. Allow 5 minutes for this activity.

Small Group Activity (p. 31)

Have each person share his/her objective with the group. Offer constructive suggestions to improve the way the objective is stated. Note suggestions for your own objective below.

Presentation (Slide 4.3, p. 32)



Instructional Methods for Adult Learners

In Class

- Role Playing
- Seminars
- Lecture and Discussion
- Problem Solving
- AV Presentation
- Structured Observations
- Laboratory Experiments
- Demonstration
- Small Group Discussion
- Games and Simulations
- Case Studies

Out of Class

- Field Experiences
- Interviews
- Projects
- Writing Papers
- Research
- Field Trips
- Take Home Exams
- Programmed Instruction
- Field Experiments
- Computer-assisted Instruction
- Tutoring

Small Group Activity (p. 31)

1. When participants have formulated their individual objectives, ask them to return to their small groups.

2. Ask each member to share his/her objective with the group. Encourage other members to provide constructive suggestions to improve the way the objective is stated.

3. It would be a good idea to list some of the criteria below on a flip chart for use during this exercise. Participants can then refer to the list as they evaluate each other's objectives.

   - State the general learning objective as a product
   - Describe student, not teacher performance
   - Select the appropriate level of generality
   - Begin learning objectives with verbs

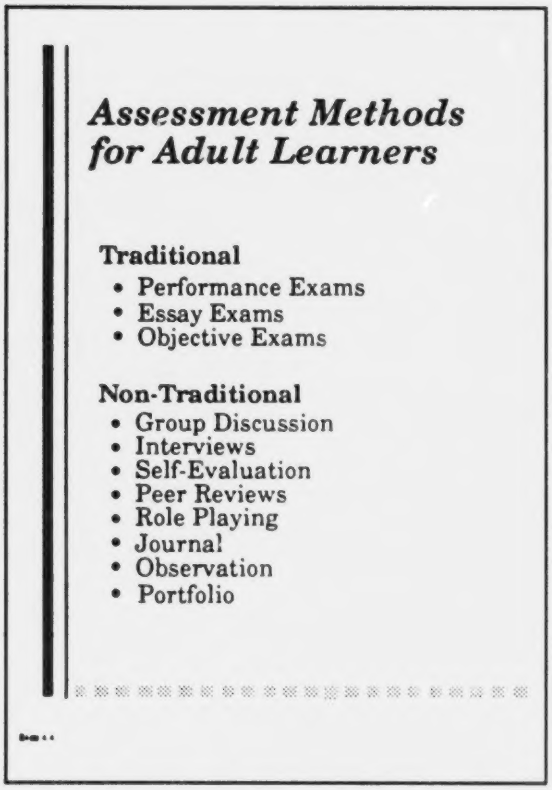
Presentation
(Slide 4.3: Instructional Methods for Adult Learners, p. 32)

1. Show Overhead Slide 4.3. Introduce the subject of learning activities by emphasizing the importance to adult learners of providing alternative tactics, tools, and examples which relate new learning to prior experience. Finding creative ways to bridge this gap, which take into consideration program goals, logistical constraints and learner needs, is a major challenge facing the instructional designer.

2. Learning activities represent those experiences that facilitate the achievement of performance objectives. While objectives describe *what* the student is to know or do, learning activities represent *how* the student is expected to achieve them.

3. Learning activities suggest the instructional strategies and methods, presentation modes, practice settings, and instructor/learner interactions which will be utilized in helping the learner accomplish the desired performance objectives. Because they are the foundation of the teaching-learning process, the design of such activities takes into account program goals, learner needs, situational/financial constraints, and relevant learning theory.

Presentation (Slide 4.4, p. 32)



Assessment Methods for Adult Learners

Traditional
- Performance Exams
- Essay Exams
- Objective Exams

Non-Traditional
- Group Discussion
- Interviews
- Self-Evaluation
- Peer Reviews
- Role Playing
- Journal
- Observation
- Portfolio

Small Group Activity (p. 32)

Have one person volunteer to share his/her objective and brainstorm, in depth, the following:

Instructional Methods	**Ways to Demonstrate Achievement**

Presentation (Slide 4.4: Assessment Methods for Adult Learners, p. 32)

1. Introduce the subject of assessment by describing its importance to instructional accountability. Refer to the movement of many higher learning institutions toward mandated outcomes assessment programs.

2. Review the primary function of any assessment: To measure learner achievement of specific objectives. Briefly review other possible uses of assessments:

    - Selection: The screening examination is used to separate those learners who are most likely to succeed in an instructional program from those who most likely will not.

    - Placement: The placement examination helps the learner decide which instructional pathway to take or where to begin in the program.

    - Diagnosis: Diagnostic tests help the learner determine areas of strength and weakness so that pacing, enrichment, or remediation options can be properly utilized.

3. Show Overhead Slide 4.4. Review the alternative methods listed.

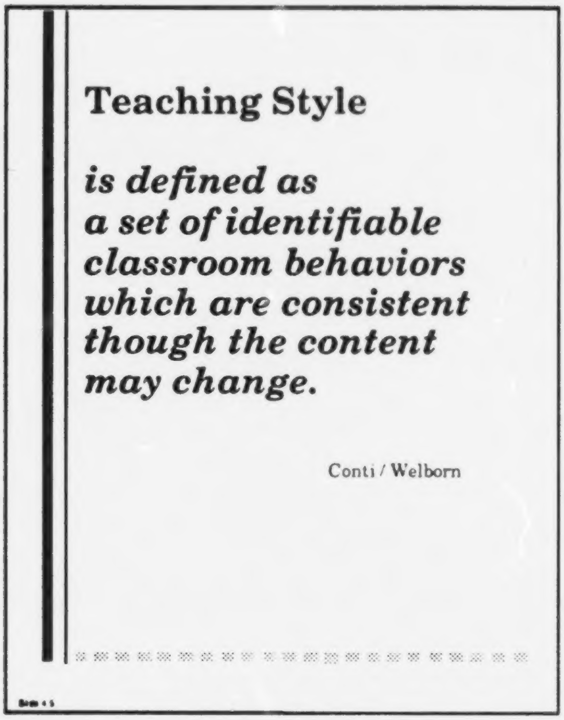
Small Group Activity

1. Ask participants within the same small groups to consider their proposed objectives and identify learning activities and assessment methods that they think would help the adult learner meet each objective.

2. Allow 15 minutes for this activity.

3. At the end of this period, ask for volunteers from each group to share any new ideas or useful suggestions gained through this exercise.

Optional. As a preface to the next overhead slide presentation, play the fourth segment of the videotape "Helping Adults Learn." Discuss the major points presented by Brookfield.

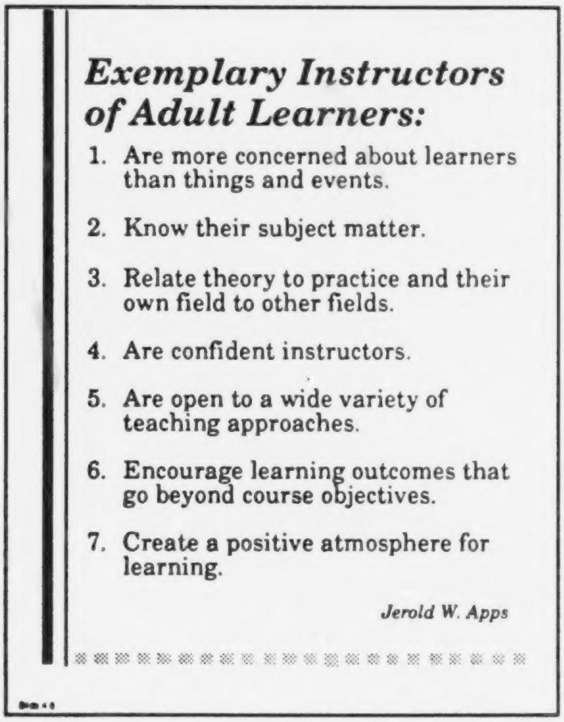


Teaching Style

is defined as a set of identifiable classroom behaviors which are consistent though the content may change.

Conti / Welborn

Presentation (Slide 4.5, p. 33)



Exemplary Instructors of Adult Learners:

1. Are more concerned about learners than things and events.
2. Know their subject matter.
3. Relate theory to practice and their own field to other fields.
4. Are confident instructors.
5. Are open to a wide variety of teaching approaches.
6. Encourage learning outcomes that go beyond course objectives.
7. Create a positive atmosphere for learning.

Jerold W. Apps

Presentation (Slide 4.6)

Presentation (Slide 4.5: Teaching Style, p. 33)

1. Show Overhead Slide 4.5. Review the following key points:

2. Gary Conti has studied the importance of teaching style for over 10 years. His studies have shown that teaching style is the single most important variable affecting learning. Review other key points.

3. Consistently being learner-centered (as opposed to instructor-centered), is the most effective style to adopt.

4. Conti says, "The secret to improving student achievement is not just in identifying the unique characteristics of each student...but rather includes practicing a teaching style which consistently treats adults with dignity and respect.

5. If we agree that our adult learner population is growing, that they have special needs and assets, and that adults want dignity and respect--then instructional delivery must reflect these things.

6. Collaboration between instructor and students is process oriented and emphasizes what the learner is doing. Instructors would do well to adopt the collaborative mode, as suggested by Conti.

Presentation (Slide 4.6: Exemplary Instructors of Adult Learners)

1. Show Overhead Slide 4.6. Briefly review the characteristics listed.

2. Explain to participants that many of the factors associated with the effective instruction of children and adolescents also apply to the adult learner.

3. A recent study by Sheckley, (1987) identified those factors that significantly differentiated the best from the worst classroom learning experiences of adults. These factors relate not only to the qualities of the instructor, but to the nature of the overall learning environment as well. These factors are shown on the following page.

4. Remind participants to read the article by Galbraith on essential skills for the facilitator of adult learning. The article is included at the end of Module 4 of their workbook (see Appendix C in this Guide).

Item	Rank	% of Tot. Variance
STUDENT CHARACTERISTICS		16%
Grade received	1	
Level of personal resources available for learning	2	
TEACHER STYLE/TECHNIQUES		91%
Made course exciting	1	
Summarized major points	2	
Made difficult topics easy to understand	3	
Related to students as partners in learning	4	
TEACHER COGNITIVE/AFFECTIVE EMPHASIS		78%
Increased appreciation for subject matter	1	
Sensitive to response of class	2	
Had command of subject matter	3	
Seemed to lack personal fulfillment	4	
EXAMINATIONS		49%
Grade reflected my knowledge in course	1	
Kept students well-informed of academic progress	2	
Had instructional value	3	
LEARNING ACTIVITIES		77%
Were interesting	1	
Welcomed class discussion	2	
Related topics to students' lives and experiences	3	
LEARNING ENVIRONMENT		71%
Promoted student interactions	1	
Accepted errors as natural part of learning process	2	
Distractions and interruptions were not present	3	
Instructional aids were easy to see and hear	4	
Students were not devalued on the basis of gender	5	

Individual Activity (p. 33)

Now think about how you do what you do. Given the group you identified, what does this suggest about your preferred teaching style and how does it fit in with what has already been discussed? What changes would you have to make in your present teaching style to accommodate these learners?

Planning Ahead (p. 34)

Begin a list of possible actions you might consider taking to insure that your teaching style and/or instructional designs are responsive to adult learners.

1.

2.

3.

4.

5.

Individual Activity (p. 33)

1. Give participants 5 minutes to complete this activity.
2. As a follow-up, ask participants to identify one or two recommendations for campus-based faculty services that would assist faculty to integrate teaching style preference and adult learning principles.
3. Follow with group discussion of their recommendations.

Planning Ahead (p. 34)

1. Ask participants to begin a list that identifies possible changes they might consider making to assure that their teaching styles and/or design of instruction is responsive to adult learners.
2. Request that participants make at least one thoughtful entry. These will not be shared with the group.

Facilitating the Next Steps: The Resources Needed

module 5

Participant Objectives (p. 45)

In this part of the workshop, you will have the opportunity to:

- Begin developing a personal action plan for making changes in your interactions with adult learners.
- Begin networking with colleagues.
- Provide feedback on the workshop.

Individual Activity

Look back at your entries in each "Planning Ahead" section and write in the space below one action that you plan to take. List the resources (time, people, funds, etc.) that you would need to accomplish it.

Module 5

Facilitator Objectives

- Provide motivation and instruction for participants on how to develop a personal action plan for making changes in their interactions with adult learners.
- Encourage participants to share ideas and common interests, and facilitate the development of collegial ties that will extend beyond the workshop.
- Reinforce the goals of the workshop and motivate participants to implement their action plans upon returning to their institution.
- Obtain feedback from participants on the workshop.

Individual Activity (p. 45)

1. Ask participants to look back at their entries in each "Planning Ahead" and write one action that they plan to do when they return to their work setting.
2. Ask them to identify the resources of time, people, or funds that would be needed to accomplish it.

Small Group Activity (p. 46)

Break into interest groups which correspond to topics covered in Modules 2, 3, and 4. Consider ways in which you can draw on your colleagues to complete your goals. Record contracts, actions, etc. below.

Individual Activity

Complete the Evaluation Form as indicated and return it to the workshop facilitator. Your feedback is critical in preparing for future workshops.

Small Group Activity (p. 46)

1. Introduce this exercise as an opportunity for participants to begin networking with colleagues that could assist them in achieving their various entries in their "Planning Ahead" sections.

2. Break the class into interest groups which correspond to topics covered in Modules 2, 3, and 4:

    - Characteristics and concerns about the adult learner
    - Designing programs and services to facilitate access and success
    - Designing instruction for adult learners

3. Invite participants to consider ways in which they can draw on their colleagues to complete their goals.

Individual Activity

1. Ask participants to complete the Evaluation Form as indicated and return it to the workshop facilitator.

2. Emphasize that their feedback is critical in preparing for future workshops.

3. Encourage written comments.

Workshop Wrap-up

1. Thank participants for their contributions to the workshop. Credit them for a successful day.

2. Encourage participants who wish to do so to stay after and continue networking or ask any questions of the facilitator.

Appendix A
Sample Agendas

6 1/2 Hour Workshop

8 Hour Workshop

6 1/2 HOUR WORKSHOP

The Schedule column has been left blank for you to note start times.

SECTION	ACTIVITY	MIN	SCHEDULE
MODULE 1	• Welcome	10	
	• Small Group Activity (p. 1)	15	
	• Individual Activity (p. 1)	20	
		45	
MODULE 2	• Presentation: Who Adult Learners Are	15	
	• Group Activity (p. 4) and Slide 2.1	15	
	• Presentation (Slide 2.2)	10	
	• Group Activity (p. 5)	10	
	• Planning Ahead (p. 5)	10	
		60	
BREAK		**10**	
MODULE 3	• Presentation (Slides 3.1-3.6)	30	
	• Individual Activity (p. 19)	10	
	• Small Group Activity (p. 19-20)	20	
	• Planning Ahead (p. 20)	15	
		75	
LUNCH		**60**	
MODULE 4	• Presentation (Slide 4.1)	15	
	• Individual/Small Group Activity (p. 30)	15	
	• Presentation (Slide 4.2)	5	
	• Individual/Small Group Activity (p. 31)	10	
	• Presentation (Slides 4.3, 4.4)	15	
	• Small Group Activity (p. 32)	15	
	• Presentation (Slides 4.5, 4.6)	15	
	• Individual Activity (p. 33)	5	
	• Planning Ahead (p. 34)	10	
		105	
BREAK		**10**	
MODULE 5	• Individual Activity (p. 45)	10	
	• Small Group Activity (p. 46)	10	
	• Evaluation Form	5	
	• Wrap-up	5	
		30	

8 HOUR WORKSHOP

The Schedule column has been left blank for you to note start times.

SECTION	ACTIVITY	MIN	SCHEDULE
MODULE 1	• Welcome	10	
	• Small Group Activity (p. 1)	15	
	• Individual Activity (p. 1)	20	
		45	
MODULE 2	• Presentation "Who Adult Learners Are"	10	
	• Video Segment 1: "The Full Wisdom of Experience" (B. Sheckley)	10	
	• Group Activity (p. 4) and Slide 2.1	15	
	• Presentation (Slide 2.2)	10	
	• Video Segment 1:"Transitions" (W. Bridges)	10	
	• Group Activity (p. 5)	15	
	• Planning Ahead (p. 5)	15	
		85	
BREAK		**10**	
MODULE 3	• Presentation (Slides 3.1-3.6)	45	
	• Video Segment 3: "First Impressions Last: An Educational Ecology" (A. Chickering)	10	
	• Individual Activity (p. 20)	10	
	• Small Group Activity (p. 20-21)	20	
	• Planning Ahead (p. 21)	15	
		100	
LUNCH		**60**	
MODULE 4	• Presentation (Slide 4.1)	20	
	• Individual/Small Group Activity (p. 30)	15	
	• Presentation (Slide 4.2)	10	
	• Individual/Small Group Activity (p. 31)	10	
	• Presentation (Slides 4.3, 4.4)	25	
	• Video Segment 4: "Facilitating Adult Learning Encounters"	10	
	• Small Group Activity (p. 32)	20	
	• Presentation (Slides 4.5, 4.6)	25	
	• Individual Activity (p. 34)	1	
	• Planning Ahead (p. 34)	15	
		155	
BREAK		**10**	
MODULE 5	• Individual Activity (p. 45)	15	
	• Small Group Activity (p. 46)	15	
	• Evaluation Form	10	
	• Wrap-up	15	
		55	

Appendix B
Overhead Slide Masters

Slide 2.1: Dimensions of Learner Diversity
Slide 2.2: Assumptions About the Adult Learner
Slide 3.1: Barriers Confronting Re-Entry Students
Slide 3.2: Factors Affecting Completion Rate
Slide 3.3: Components of Program Design
Slide 3.4: Types of Entry Services
Slide 3.5: Types of Ongoing Services
Slide 3.6: Types of Exit Services
Slide 4.1: The Process of Designing Instruction
Slide 4.2: Techniques for Writing Objectives
Slide 4.3: Instructional Methods for Adult Learners
Slide 4.4: Assessment Methods for Adult Learners
Slide 4.5: Teaching Style
Slide 4.6: Exemplary Instructors of Adult Learners

Dimensions of Learner Diversity

Developmental Tasks

Prior Experience

Life Transitions

Learning Styles

Learning Goals

Participation in Formal Programs

Life Roles

Motivations

Assumptions About the Adult Learner

- Capable of learning throughout the life cycle
- Proven learner through education and life experience
- Motivated by life events to learn
- Practical, problem-solving orientation to learning
- Unique knowledge and experience brought to the learning environment
- Self perception of independence
- Adaptable to a self-directed learning environment
- Experiences barriers to learning due to occupational and family roles

Barriers Confronting Re-Entry Adults

Institutional Barriers

- Policies and requirements
- Procedures and practices
- Inconvenient schedules and locations
- Inappropriate courses of study

Situational Barriers

- Employment obligations
- Family responsibilities
- Transportation to classes
- Financial constraints

Dispositional Barriers

- Time and management
- Reactions of family, peers, etc.
- Lack of self-confidence
- Skills

K. Patricia Cross

Factors Affecting Completion Rate

Re-entry Student Factors

- **Reduced load per semester**
- **Combined school and employment**

University Factors

- **Difficulties in enrolling in major courses**
- **Scheduling difficulties with General Education Courses**

California State University
Office of Analytic Studies,
1988

Components of Program Design

Effective Program Design is based on learner characteristics and includes appropriate:

- Admission Competencies / Requirements
- Outcome Competencies
- Degree Completion Requirements
- Content and Sequence (Courses)
- Degree Completion Options
- Student Support Services
- Delivery Systems
- Evaluation Plan

Types of Entry Services

- Recruitment
- Admissions
- Financial Aid
- Orientation
- Counseling and Advisement
- Developmental Assessment
- Assessment of Prior Learning

Types of Ongoing Services

- Academic advisement
- Personal counseling, developmental mentoring, and career planning
- Extended access to facilities and personnel
- Assessment and learning resource centers
- Remedial / advanced placement services
- Distance learning options
- Life services (housing, family care, health, food, transportation)

Types of Exit Services

- Culminating overview and planning course
- Reviews with advisor and counselors
- Career planning and placement services

The process of designing instruction is built around the answers to these four questions:

1. Who are the students I must teach?
2. What learning objectives should I establish for each topic or unit?
3. What instructional methods can be used to accomplish these objectives?
4. How should student learning be evaluated?

Jerrold Kemp

Techniques for Writing Objectives

1. State the objective as a product
2. Describe student, not teaching performance
3. Avoid being too broad or specific
4. Begin the objective with a verb

Instructional Methods for Adult Learners

In Class

- Role Playing
- Seminars
- Lecture and Discussion
- Problem Solving
- AV Presentation
- Structured Observations
- Laboratory Experiments
- Demonstration
- Small Group Discussion
- Games and Simulations
- Case Studies

Out of Class

- Field Experiences
- Interviews
- Projects
- Writing Papers
- Research
- Field Trips
- Take Home Exams
- Programmed Instruction
- Field Experiments
- Computer-assisted Instruction
- Tutoring

Assessment Methods for Adult Learners

Traditional

- Performance Exams
- Essay Exams
- Objective Exams

Non-Traditional

- Group Discussion
- Interviews
- Self-Evaluation
- Peer Reviews
- Role Playing
- Journal
- Observation
- Portfolio

Teaching Style

is defined as a set of identifiable classroom behaviors which are consistent though the content may change.

Conti / Welborn

Exemplary Instructors of Adult Learners:

1. Are more concerned about learners than things and events.
2. Know their subject matter.
3. Relate theory to practice and their own field to other fields.
4. Are confident instructors.
5. Are open to a wide variety of teaching approaches.
6. Encourage learning outcomes that go beyond course objectives.
7. Create a positive atmosphere for learning.

Jerold W. Apps

Appendix C
Articles Included in Workbook

The Adult as Learner: A Case for Making Higher Education More Responsive to the Individual Learner

Summary: Facilitating Access and Success

Adapting the University to Adult Students: A Developmental Perspective

A Challenge

Guide Learning with Objectives that Take a Student's Perspective

Essential Skills for the Facilitator of Adult Learning

THE ADULT AS LEARNER: A CASE FOR MAKING HIGHER EDUCATION MORE RESPONSIVE TO THE INDIVIDUAL LEARNER

From CAEL News. "The Adult as Learner: A Case for Making Higher Education More Responsive to the Individual Learner," by B. G. Sheckley, 1984, Columbia, MD: Council for Adult and Experiential Learning. Reprinted by permission.

At the recent Council for Adult and Experiential Learning (CAEL) institute, Adults as Learners: Research to Practice, we spent an entire evening discussing the field of adult learning. Many interesting questions were posed: Is the adult a unique learner? Are all adults necessarily adult learners? What do we mean by "adult learner?" Is there a discipline we can call adult learning? What are the key differences between adult and "non-adult" learners? Can we describe how the adult learns? Is there an adult learning style? When we speak of the "adult learner", which individual learner are we talking about? Do the central issues relate to being an adult or to being a learner? Are issues of access and financial support for adult learners appropriate public policy issues?

The engaging debate of these questions—which lasted several hours that evening and never abated during the remaining days of the institute—led to some interesting conclusions. First, the term "adult learner" is a nominal label for a heterogeneous cohort of learners. Not only are these "adult learners" participating in higher education in increasing numbers but also, they are widely diverse in their learning interests, educational goals, individual differences, experiential backgrounds, motives for pursuing learning projects, and patterns of participating in formal classroom programs. Secondly, there is no single characteristic of "adult learners" which is not present—to some degree—among all learners. In other words, the adult learner represents an extreme on a continuum depicting a range of diversity among all learners. Thus, when college educators speak of the adult learner, they may be using an extreme prototype which exemplifies the increasing diversity of the college student population. Additionally, the greatest impact of the adult learner on higher education might be through the individual and personal examples which suggest that the higher education system needs to be more responsive to the educational interests of individual learners. Finally, if we are to improve the specific practice of adult education and the general practice of higher education, we must develop accurate perspectives on what we mean by "adult learner."

Is there a theory about adults as learners?

While there is an increasing body of research on the adult learner and an accompanying growth of suggestions relating to principles of effective practice in teaching adult learners, there still seems to be a lack of connection between existing research and practice. In one sense, this is understandable since, ad K. Patricia Cross (1981) writes, there is no comprehensive theory addressing all the complexities of adults as learners. In fact, as Cross notes, theory is one of the most underutilized vehicles for understanding the various aspects of adult learning. According to Cross (1981), there is not a strong emphasis on theory in adult education because of: "...the enormous diversity of adult learning situations, the practitioner domination of the field, the market orientation of nonsubsidized education and, frankly, the lack of desire or perceived need for theory" (p. 221).

Although there is no comprehensive theory addressing all aspects of the phenomenon adults as learners, there is research in related fields (e.g., developmental psychology, clinical psychology, etc.) and research about the practice of adult education which advances our understanding of adults as learners. Let us begin with this research to discuss the issue of the adult as a different learner.

Is the adult a different learner?

A key difference between what some refer to as the adult learner and the so-called traditional 18-24 year old student relates more to being an adult than to being a learner. This fact is reflected in the various attempts to develop a workable definition of "adult learners." The Commission on Higher Education and the Adult Learner, for example, defines "adult learner" as an individual whose major life role is something other than full-time student (Chickering, 1983). The emphasis on adult roles as a definition of adult learner is perhaps accurate since a review of the research on learning provides few distinctions that separate adults as different learners.

There is a lively debate on the question: are adults different learners? Although the first discussion of this issue began around 1926 as Lindeman advocated a practical approach to adult education, the question came into sharp focus with Malcolm Knowles' ideas about the adult learner as a neglected species (1978). Knowles described a difference between pedagogy (i.e., the art and science of teaching children) and andragogy (i.e., the theory of adult learning). Andragogy was based on four assumptions: 1) An adults' self-concept is invested in being self-directed; 2) Since adults have rich reservoirs of experience, teaching must emphasize analysis of experience; 3) Readiness to learn is related to developmental tasks; 4) Adults have a problem-centered orientation to learning.

The usefulness of andragogy is inconclusive. There are questions about andragogy as a learning theory, a philosophical position, a political reality, or a set of hypotheses subject to empirical verification (Cross, 1981). As noted by Cross (1981), it is not clear whether Knowles is advocating two distinct approaches to teaching, one for children and a different one for adults. The issue is clarified as Knowles states: "So I am not saying that pedagogy is for children and andragogy is for adults, since some pedagogical assumptions are realistic for adults in some situations and some andragogical assumptions are realistic for children is some situations...each is appropriate given the relevant assumptions" (1979, p. 53).

As with others attempting what might be called philosophical approach to characterizing the adult as a different learner, Knowles has more success in establishing an argument for an acceptable alternative to traditional education than in establishing the adult as a unique learner.

Another attempt to understand the differences which set the adult learner apart followed a path of "clientele analysis." In this approach, adults who participated in formal educational programs were surveyed and described in attempts to understand those characteristics which made them distinct. Coolican (1974) notes two limitations of these studies: 1) The tendency to forget the differences within groups while focusing on differences among groups; and 2) The focus on participation in formal instruction and not on the whole pattern of learning both in and outside the classroom. Taken together, the "clientele analysis" studies indicated that prior education, as the major predictor of participation, cut across all demographic descriptors (Cross, 1981). Additionally, the demographic characteristics only accounted for about 10 percent of the variance associated with participation in organized instruction (Anderson and Darkenwald, 1978). In other words, the clientele analyses did not note characteristics of adult learners which conclusively distinguish them from all other learners.

A third line of research on the adult learner investigated the learning behavior of individual adults. Allen Tough (1979), for example, found that adults tended to be very pragmatic and self-directed learners. In comparing the learning behavior of adults to those of young 10 and 16 year old learners, he concluded: "The data suggest that the out of school learning projects of young learners are fairly similar to adult projects" (1979, p. 23). While this research provided an understanding of the individual learning behavior of adults, it did not provide a distinctive picture of the adult learner. Clearly this research pointed out that many of the distinctive aspects of the adult as learner were a matter of degree and, sometimes, many of the distinctions were as great within groups of adult learners as between groups of older and younger learners.

The line of research related to individual development and individual differences delineates some issues specific to adults. This research shows that adults at different points in their lives have different learning interests and different perspectives on learning. Initially, these differences were seen as directly related to age, as in the ages and stages research (e.g., Gould, 1978). Recent research (e.g., Schlossberg, 1983), however, suggests that the transition itself is the important event—regardless of the age when it occurs. In other words, adults are not distinct learners just because they are going through life transitions. People of all ages—children not excluded—encounter life transitions. The challenge to education is to provide helping environments for learners of all ages undergoing life transitions. The major characteristic distinguishing adult learners is the wide heterogeneity of their life transitions.

Finally when we look at the learning process itself, Parsons (1978) notes that adults learn using the same processes of learning as do younger students. The only difference is that the interference effect seems more predominant among adult learners. In other words, because adult learners tend to have more responsibilities and complications in their lives than younger learners, there is more "interference"; thus, memorization and recall are more difficult for adults. McClusky (1970) refers to this as a principle of "margin"—or the resources and abilities a person has to devote to learning after he/she takes care of the demands made on him/her by self and society. From this perspective, the adult learner is different from a traditional student in that the adult learner has more "interference" and less "margin" for learning. However, this distinction is not particular to adult learners; it applies equally to learners of any age who have a wide range of responsibilities.

The major challenge adult learners present to the educational system is a wide diversity of interests, styles, motives, developmental tasks, life roles and patterns of learning. If the issue of diversity is seen as continuous—and not dichotomous— then the adult learner represents one extreme of the continuum. As the educational system adapts to the individual educational interests of the adult learner, the capability for improving the educational systems response to individual learners all along the continuum is greatly enhanced.

Diversity: A Key Characteristic of Adult Learners

The distinctive characteristic of the adult learner is diversity. As depicted in Table 1, the "adult learner" represents a heterogeneous group of learners who are widely diverse in learning styles, motivation for learning, life transitions, life roles, learning goals, developmental tasks, prior experience, and patterns of participation in formal educational programs.

In Part II of this article, we will discuss characteristics which, as a matter of degree, tend to distinguish the adult learner as a special learner and which require the higher educational system to provide alternatives. The common practice of offering standardized programs designed to meet the learning needs of a homogeneous population will not accommodate adult learners.

directed learners. In comparing the learning behavior of adults to those of young 10 and 16 year old learners, he concluded: "The data suggest that the out of school learning projects of young learners are fairly similar to adult projects" (1979, p. 23). While this research provided an understanding of the individual learning behavior of adults, it did not provide a distinctive picture of the adult learner. Clearly this research pointed out that many of the distinctive aspects of the adult as learner were a matter of degree and, sometimes, many of the distinctions were as great within groups of adult learners as between groups of older and younger learners.

The line of research related to individual development and individual differences delineates some issues specific to adults. This research shows that adults at different points in their lives have different learning interests and different perspectives on learning. Initially, these differences were seen as directly related to age, as in the ages and stages research (e.g., Gould, 1978). Recent research (e.g., Schlossberg, 1983), however, suggests that the transition itself is the important event—regardless of the age when it occurs. In other words, adults are not distinct learners just because they are going through life transitions. People of all ages—children not excluded—encounter life transitions. The challenge to education is to provide helping environments for learners of all ages undergoing life transitions. The major characteristic distinguishing adult learners is the wide heterogeneity of their life transitions.

Finally when we look at the learning process itself, Parsons (1978) notes that adults learn using the same processes of learning as do younger students. The only difference is that the interference effect seems more predominant among adult learners. In other words, because adult learners tend to have more responsibilities and complications in their lives than younger learners, there is more "interference"; thus, memorization and recall are more difficult for adults. McClusky (1970) refers to this as a principle of "margin"—or the resources and abilities a person has to devote to learning after he/she takes care of the demands made on him/her by self and society. From this perspective, the adult learner is different from a traditional student in that the adult learner has more "interference" and less "margin" for learning. However, this distinction is not particular to adult learners; it applies equally to learners of any age who have a wide range of responsibilities.

The major challenge adult learners present to the educational system is a wide diversity of interests, styles, motives, developmental tasks, life roles and patterns of learning. If the issue of diversity is seen as continuous—and not dichotomous— then the adult learner represents one extreme of the continuum. As the educational system adapts to the individual educational interests of the adult learner, the capability for improving the educational systems response to individual learners all along the continuum is greatly enhanced.

Diversity: A Key Characteristic of Adult Learners

The distinctive characteristic of the adult learner is diversity. As depicted in Table 1, the "adult learner" represents a heterogeneous group of learners who are widely diverse in learning styles, motivation for learning, life transitions, life roles, learning goals, developmental tasks, prior experience, and patterns of participation in formal educational programs.

In Part II of this article, we will discuss characteristics which, as a matter of degree, tend to distinguish the adult learner as a special learner and which require the higher educational system to provide alternatives. The common practice of offering standardized programs designed to meet the learning needs of a homogeneous population will not accommodate adult learners.

BEST COPY AVAILABLE

TABLE 1

A Continuum Depicting Diversity Among Learners

TRADITIONAL STUDENTS	ADULT LEARNERS
HOMOGENEITY	HETEROGENEITY

DIMENSIONS OF CONTINUUM

Learning Styles	Motivation
Life Transitions	Life Roles
Developmental Tasks	Learning Goals
Prior Experience	Patterns of Participation in Formal Programs

As K. Patricia Cross (1974) discusses, opening the door to educational opportunity is not enough. "For some students who have been underrepresented in colleges, the door to traditional postsecondary education opens only on more of the same kind of education that has failed to serve them in the past" (Cross, 1974, p. xi). The challenge is to develop an educational system which responds to the individual needs of all learners. As higher education adapts to the diversity and unique needs of the adult learner, the capacity to respond to the educational needs of all learners will be enhanced.

Which characteristics of adults require the educational system to adapt?

While adults may not be different learners, there are ways adults differ from traditional 18-24 year old students which require the higher educational system to adapt. Although these differences are highlighted by adult learners, they are present to some degree in all learners and provide a strong argument for altering aspects of the existing higher educational system.

Adult learners must adapt to a rapidly changing world

While some sources attribute the phenomenon of adult learning simply to increasing numbers of adults, there are factors other than a demographic shift which seem to be operating. Cross (1981), for example, notes that the rate adults participate in organized instruction has increased two and one half times as fast as the growth of the eligible population. Not only are more adults participating in organized instruction, but they are also participating to a much greater degree than ever before.

Our rapidly changing world provides a strong impetus for adults involved in various life roles to engage in continuous learning. Cross (1981) lists several changes which have encouraged the growth of what she terms "the learning society." Specifically, factors such as job obsolescence, increased participation of women in the labor market, increased longevity, job competition, increased leisure time, an aging work force, higher aspirations and social acceptability of career change all contribute to radically changing career and educational patterns. In analyzing our changing social patterns, Yankelovich (1981) discusses the new rules evolving in our society as we move from depression era values to instrumental values and new expressive values. Besides these social changes, technological changes in all fields require continuous education to remain competent. Technological advances result in radically different ways of doing things. These social and technological changes spur adult learning.

Oxnard (1982) states that anyone who conceives of the changes higher education needs to make in serving adult learners only as accommodating increased numbers misses the entire point. Specifically, he discusses the new educational interests of adults for assistance in making a mid-life career change, for the skills needed to stay abreast of the technological advances in a current career field, for leisure time activities and for adjusting to new life roles.

Although the various career, community and related life roles of adults require them to participate in continuous learning to stay abreast of changes, these same pressures are now impinging, albeit to a lesser degree, on traditional 18-24 year old students as they grapple with issues such as the prospect of five to seven career changes during their lifetime. As higher education provides flexible options for the adult learner to stay abreast of a rapidly changing world, the educational opportunities of all learners are improved.

Adult learners are usually pragmatic

The pragmatic nature of adult learning was introduced by Lindeman in 1926 when he wrote that the approach to adult education should be via the route of situations, not subjects. This approach is even more appropriate today given our rapidly changing world.

In studying individual adult learning projects, Tough (1979) describes how pragmatic interests motivated adult learners. He found that most people started their learning project because they wanted to use the knowledge or skill to take action, and continued their project because they wanted to use the knowledge or skill to take action, and continued their project because they anticipated using the learning in a concrete manner such as performing some responsibility at a higher level. Similarly, in a study conducted with community college students, Sheckley (1983) found that immediate use was the reason most adults gave for undertaking learning projects. Penland (1977) found that 76 percent of the learning projects reported by adults related to practical topics such as business, jobs or child care. Tough (1979) also found that one reason adults chose to conduct self-planned learning projects—instead of participating in an institutionally based program—was their belief that they would actually lose time by turning the responsibility for planning over to someone else. In summarizing the research on "why adults learn," K. Patricia Cross (1981) concludes that most adults are responding to transitions in which needs for new job skills or for knowledge about family life serve as "triggers" to initiate learning activity.

The pragmatic nature of adult learners accentuates the importance of personal knowledge as opposed to objective knowledge (Dewey, 1938). According to this principle, the more personally relevant the learning is, the more motivated the learner is to pursue the learning. The principle applies to learners of all classifications. As the educational system adapts to accommodate the pragmatic interests of the adult learner, it will provide opportunities for all learners to conduct personally relevant learning projects.

Adult learners are developing over an entire lifespan

There is a new appreciation of adult potential and of adult development. In only a decade, the study of adults as learners has changed from an investigation of decay and decline to an analysis of growth and potential. Thorndike (1935) for example, studied the decline of adult IQ and performance as a function of age. More recently, Horn (1979) has shown that, while speed and performance may decline with age, the ability to synthesize and apply information increases with age.

The ideas of adult development as a lifelong process originally proposed by Carl Jung and Erik Erickson have been expanded more recently by Levinson (1978), Gould (1978), and Loevinger (1976). There are three specific implications of the developmental stage research for adults as learners. First, adults at different stages of development would have different learning interests reflective of different capacities and different perspectives on the world. Secondly, education can play an important role in stimulating movement from one stage to the next. Finally, the developmental process will vary as a function of individual differences.

A related line of research discusses how life transitions promote adult learning (e.g., Aslanian and Bricknell, 1980; Schlossberg, 1983). From the transitions research we can understand that adults learn because transitions are an inevitable part of life, and change creates the challenges and stimulation that promote learning and therefore development.

The developmental focus so important to understanding adult learners has important implications for learners of all ages. For example, Chickering (1981) argues that individual development is a central mission of institutions of higher education. Thus, as the higher educational system adapts to accommodate the different developmental ages and stages of adult learners, it also increases important developmental learning opportunities for all learners.

Adult learners are heterogeneous

Although individual differences exist among individuals of any age group, the range of differences increases dramatically among older adults. According to Chickering (1981) and Knowles (1978), as individuals grow older they tend to demonstrate an ever increasing range of individual differences. Neugarten (1976) describes the process of "individual fanning out" by noting that there is greater variability among a group of 60 year olds than among a group of 10 year olds.

These differences have important implications for understanding adults as learners and for designing facilitating learning environments. Increasingly, the research on individual differences demonstrates that adult learners come to the college classroom with a wide array of individual differences which may not match the prevailing classroom environment which usually assumes a relatively homogeneous student population. For example, Kolb (1981) describes how individuals have individual learning preferences. Tough (1981) discusses how adults vary in their tendency to be self-directed learners. Heath (1964) delineates how three distinct temperaments developed and learned best within a university setting. Rotter (1966) develops the idea that individuals differ in the perception they have of the amount of control they exercise over the environment. Some individuals, for example, believe that luck, fate, or chance controls their lives while others believe that they control their own destiny.

From the research on individual differences, we know that there is a range of variability within any group of learners. From the research on adult development, we know that this range of variability increases with age. One of the greatest challenges adult learners present is the wide range of individual differences they bring to the classroom. As higher education adapts to this heterogeneity, the capability to accommodate individual differences among all age groups will be increased.

Adults are constantly learning

As previously noted, adult learners are individuals whose major life role is something other than full-time student. Accordingly, adults, in their various life roles, have wide range of learning resources available to them. Several research studies show that adults actively use these resources (Sheckley, 1983).

When a broad definition of what constitutes "learning" is used, the research suggests almost all adults are constantly learning. Petersen (1979), in describing the sources of education and learning in the United States, suggests that "virtually everyone" uses individual and personal sources of learning. In a study of the educational pursuits of the American adult Johnstone and Rivera (1965) found that approximately one person in five had been active in some form of learning during the twelve-month period before the interview.

In his investigations, Tough (1979) used the concept of learning project to study the learning behavior of adults. He defined learning project as a series of related episodes adding up to at least seven hours. "In each episode, more than half of the person's total motivation is to gain and retain certain fairly clear knowledge and skill, or to produce some other lasting change in himself" (Tough, 1979, p. 6). Tough found that the average adult in his study spent 700 to 800 hours each year completing eight separate learning projects. One major outcome of Tough's studies was the validation of the extent of adult learning, or, as noted by Coolican (1975), the question regarding adult learning was no longer whether adults learned, but how much they learned.

The research of Tough (1979), Petersen (1979), and Johnstone and Rivera (1965) provides an interesting contrast to a more traditional view of adult learning as participation in an institutional based program of study. Whereas the studies cited above suggest that virtually all adults are learning, the National Center for Education Statistics (NCES), using a very traditional view of adult learning, reports that only 12 percent of adults in America participate in organized learning. These contrasting viewpoints, when combined, provide an accurate perspective on two conclusive aspects of adult learning: 1) Adults are constantly learning; and 2) Only a small percentage of their learning occurs in a classroom.

This research indicating that adults are constantly learning presents several challenges to institutions of higher education. First, the challenge to increase access to institution based educational resources for learners who are not interested in classroom based programs. Secondly, the challenge to expand classroom based programs to use the experiential learning resources adults encounter in their various life roles outside the institution. Next, the challenge to structure the academic program so that it builds on the experiential learning adults have acquired in their various life roles and does not require them to repeat learning they may have acquired in an extra-institutional setting. Finally, the challenge to recognize the wide diversity of learning individual adults have acquired outside the academy.

As institutions of higher education adapt to the heterogeneous backgrounds and the extra-institutional learning of individual adults, and use the rich experiential learning opportunities available in respective adult life roles, the opportunities for learners of all ages will be improved.

What are the implications for higher education?

Throughout this article, we have seen that the major challenge presented by the adult learner is an issue of diversity. Chickering (1983) discusses how educational practices at many institutions are oriented to serve a narrow range of educational and developmental possibilities. Because of the diversity within any population of adult learners, an institution serving adult learners simply cannot design its educational program for an assumed range of homogeneous student interests. When adult learners are involved, the homogeneity does not exist.

When an institution has an adult student population, the institution must be able to serve adult learners who are adapting to a changing world, have a pragmatic orientation to learning, are progressing through various developmental stages and are frequently undergoing role and status transitions, are becoming more unique with each passing year, are constantly learning in a wide variety of settings, and have a great many demands on personal time, energy and emotions. As institutions make this adaptation to serve the wide diversity of individual educational needs and interests of adult learners, education opportunities for all students as individual learners will be increased.

The changes required for this adaptation do not represent a wholesale restructuring of higher education. As noted by Chickering (1983) all that is required is a shift of attitude so that administrators, counselors and faculty can have some room to maneuver as they make changes to accommodate an increasingly diverse student population. According to Chickering (1983), the changes involve more flexible and varied alternatives for access, greater recognition of personal, professional and social contexts, recognition of prior experience and use of ongoing experiences and responsibilities, greater responsiveness to individual responsibilities, and greater integration of theory and practice.

These changes are neither monumental nor impossible. Many institutions have already made changes to respond to the diverse cohort of adult learners. Such programs deviate from traditional college programs in one or more of eight dimensions: location, time, student learning objectives, content, learning activities, learning resources, evaluation and authority (Chickering, 1983). As these changes are made, the programs become more responsive to individual learners.

Looking closely at what must be done to adapt higher education to serve the adult learner, we understand that the shift relates to accommodating an increasingly diverse learner population. If we are serious about adapting higher education to the diverse educational interests of the adult learner, we also improve the ability of higher education to accommodate individual differences among all learners. As we state a case for adapting to the adult learner, we make a strong case for improving the capacity of higher education to respond to the educational needs and interests of all learners as individuals.

REFERENCES

Anderson, R. E. & Darkenwald, G. C. Participation and persistence in American adult education. New York: College Board, 1979.

Aslanian, C. B. & Bricknell, H. M. Americans in transition. New York: College Entrance Examination Board, 1980.

Chickering, A. W. and Associates The modern American college. San Francisco: Jossey-Bass, 1981.

Chickering, A. W. Adults as Learners. Unpublished manuscript prepared for the Commission on Higher Education and the Adult Learner, 1983.

Coolican, P. M. Self-planned learning: Implications for the future of adult education. Syracuse, NY: Educational Policy Research Center, Syracuse University Research Corporation, 1974.

Cross, K. P. Adults as learners. San Francisco: Jossey-Bass, 1981.

Cross, K. P. Adult learners: Characteristics, needs, and interests. In R. E. Petersen (Ed.), Lifelong learning in America. San Francisco: Jossey-Bass, 1979.

Cross, K. P. Beyond the open door. San Francisco: Jossey-Bass, 1974.

Dewey, J. Experience and education. New York: Collier Books, 1938.

Gould, R. Transformations. New York: Simon and Schuster, 1978.

Heath, R. The reasonable adventurer. Pittsburg: University of Pittsburg Press, 1964.

Horn, J. L. Organization of Data on Life-Span Development of Human Abilities. In L. R. Goulet and P. B. Baltes (Eds.) Life span developmental psychology: Research and theory. New York: Academic Press, 1970.

Johnstone, J. W. & Rivera, R. J. Volunteers for learning. Chicago: Aldine, 1965.

Knowles, M. The adult learner: A neglected species, second edition. Houston: Gulf Publishing Company, 1978.

Knowles, M. Andragogy Revisited Part II. Adult education, 30 (1), 1979. p. 52-53.

Kolb, D. A. Learning Styles and Disciplinary Differences in A. W. Chickering (Ed.) The modern American college. San Francisco: Jossey-Bass, 1981.

Lindeman, E. C. The meaning of adult education. New York: New Republic, 1926.

Loevinger, J. Ego development: Conceptions and theories. San Francisco: Jossey-Bass, 1976.

McClusky, H. Y. A dynamic approach to participation in community development. Journal of the community development society, 1, 25-32. 1970.

Oxnard, C. E. Granduate education and the new experiential learning. In F. Jacobs & R. J. Allen (Eds.) New directions for experiential learning: Expanding the missions of graduate and professional education. Washington: Jossey-Bass, Inc. 1982.

Parsons, J. Adults learning differently than children: An examination of an old basic assumption. ERIC Document Reproduction Service No. Ed 166372, 1978.

Penland, P. Individual self-planned learning in America. Washington D.C.: Office of Education, U.S. Department of Health, Education and Welfare, 1977.

Petersen, R. E. Present Sources of Education and Learning. In R. E. Petersen and Associates, Lifelong learning in America. San Francisco: Jossey-Bass, 1979.

Rotter, J. B. Generalized Expectancies for Internal Versus External Control of Reinforcement. Psychological monographs, 80, (1, Whole No. 609). 1966.

Schlossberg, N. K. Counseling adults in transition. New York: Springer Publishing Company, 1983.

Sheckley, B. G., Adult learning as a function of temperament ego maturity and perceived locus of control: How individual differences affect adult learning projects. Doctoral Dissertation, University of Connecticut, 1983.

Thorndike, E. L. Adult interests. New York: Macmillan, 1935.

Tough, A. The adult's learning projects: A fresh approach to theory and practice in adult learning, second edition. Ontario: The Ontario Institute for Studies in Education, 1979.

Yankelovich, D. New rules. New York: Random House, 1981.

BEST COPY AVAILABLE

Summary: *Facilitating Access and Success*

I. PROGRAM DESIGN

While the most crucial interface between the student and institution typically occurs in the classroom in the form of specific teaching-learning activities, that is only one part of the total educational experience. The learner is also affected by a wide array of policies and operating procedures at the departmental, institutional, and, in multi-campus structures, system level.

When planning educational programs for adults, certain questions must be raised.

- Does the curriculum respond to the unique needs of the adult learner?
- Do admission policies promote or impede access (e.g., policies on out-dated coursework, partially completed G. E. programs, non-transferable lower-division courses, etc.)?
- Are academic support services appropriate to the adult learner available and accessible?
- Is instruction available in a variety of modes to accommodate the life/work situations of adult learners?
- Are degree completion options available which acknowledge the adult learner's prior learning?

Because faculty are responsible for making policy, it is important that they understand the impact of such issues on the adult learner.

Ideally, these issues would be dealt with as a whole in designing a curriculum. Based on an understanding of the characteristics of the learner group to be served, an effective program design would address the following issues:

- Admission Competencies/Requirements
- Outcome Competencies
- Degree Completion Requirements
- Content and Sequence (Courses)
- Degree Completion Options
- Student Support Services
- Delivery Systems
- Evaluation Plan

A systematic program development process is the key to insuring that the program meets the need and *will* facilitate access and success. The process hinges on answering the question: who are the learners to be served by the program—what is their educational background, how and where do they live and work, what are they expecting to achieve as a result of further education, what barriers do they confront in returning to school, etc.? To be effective, the program must be based on answers to these questions.

This systematic and learner-centered program development process is outlined in further detail in the Center for Innovative Programs' document entitled Adult Learner Education System and in other articles listed in the Bibliography.

II. ADULT LEARNER BARRIERS AND SUPPORT SERVICES NEEDS

Adult learners bring to their educational experience numerous assets. They are typically highly motivated, have a wealth of background experiences gained from work and other life experiences, and have proven themselves to be successful learners in a variety of settings.

Unfortunately, adults also typically confront numerous obstacles in returning to school which both block access to higher education and success once admitted. These obstacles result from the complex life/work situation and part-time student status of most adult learners, and from the fact that their previous formal education may have been years ago. Unlike the traditional full-time student, for whom the educational experience is the major preoccupation, the adult learner must juggle a variety of roles and demands simultaneously. Without proper support, these demands—which include occupational, family, and/or community responsibilities—may become barriers to higher education. A leading adult learning theorist, K. Patricia Cross, has suggested the following categories of obstacles commonly confronting the adult learner:

Institutional Barriers. Educational procedures and practices that prevent or discourage adult learners. These include admission and transfer of credit policies, class scheduling, and access to necessary services such as the admissions office, library, and academic advising.

Situational Barriers. Obstacles arising from an individual's current life situation. For example children needing care or supervision, transportation to classes, and financial constraints.

Dispositional Barriers. Peoples' attitudes and perceptions of themselves as learners. Many, if not all, adult learners struggle at one time or another with issues such as finding adequate time to complete classwork, lack of self-confidence ("Am I too rusty?" "Will I fit?"), and adverse family/work/community reactions resulting from their reduced availability for other activities.

Because they were typically designed for the younger and full-time student, most higher education institutions are not prepared to deal effectively with the above mentioned barriers. Appropriate student support services are too often either limited or nonexistent. There is considerable evidence that effective support services contribute to both retention and progression of learners of all ages. In addition to such pragmatic considerations, it can also be argued that these services simply enhance the quality of the educational experience—and that adult learners deserve this enhancement to the same extent as younger traditional age students. In order to achieve genuine involvement in learning, or institutions must provide a place where adult learners feel they *matter* and *belong*.

To at least some extent, older learners have somewhat different support services needs and interests than their younger traditional age colleagues. Further, the great majority of older learners are also part-time/non-residential students, resulting in additional differences in individual life demands and priorities from their full-time/residential counterparts. Adult learners are by definition a heterogeneous group. The challenge for higher education is to design student support services for that diversity.

Adapting the University to Adult Students: A Developmental Perspective

Edmund F. Ackell, with the assistance of
Rozanne G. Epps
Nicholas A. Sharp
Howard L. Sparks

INTRODUCTION

Ever since the G.I.'s went back to school in the late 1940's, adult students have been increasing their importance in American colleges and universities. During the latter 1970's, especially, there was significant growth in the rate of participation of adults in college. Under the impact of this growing number of adults in classrooms, average student ages have gone up, percentages of part-time and evening-only students have increased, and clearly observable shifts have been taking place in student interests in both curriculum and services. Increasing demands for professional curricula, especially at the graduate level, for evening and weekend classes, and for typically adult-oriented services ("mid-life" counseling, flexible requirements and even child-care, to name only three) all reflect the increasingly important role of working, non-resident students who come to college part-time, night or day, bringing a different set of problems and expectations with them.

Many causes can be educed for this new impetus for adults to return to college, either to complete their basic degrees, to extend their education with post-graduate study, or simply to study for personal and professional enrichment. The general societal concern for credentials, the almost militant spirit of "professionalism" that has developed in all sorts of vocational fields, and the increasing sophistication of organizational and technological skill demanded by contemporary institutions have all combined to make today's adult keenly aware of his/her need for continual updating and expanding of knowledge and skill. And this is a trend which will, almost surely, continue to increase throughout the forseeable future.

As a result, hardly a college or university in the country has failed to make some kind of adaptation to the adult students who, in ever increasing numbers, seek to avail themselves of higher education. The nature and kinds of adaptations have varied, of course, depending on the history and mission of each institution, on the various developments of federal and , especially, state-level education policies as they have been applied in different regions and states, and on the social, political and, crucially, the economic environment within which each institution exists. And yet, even within these variations, it remains true that only a very small number of American colleges and universities has in the last 5-10 years failed to develop some kind of adaptations to the needs of adult students, and some institutions have made substantial modifications in their structure and functioning in order to accommodate themselves to this new group of students.

In this paper, the intent is to suggest two main things about this process of adaptation and change. First, the process is developmental and this developmental or evolutionary adaptation can be conceptualized as three "stages," or steps. They range from a relatively primitive organizational stage through a more

---

[1] Edmund F. Ackell is President of Virginia Commonwealth University. This paper was originally prepared in 1981 for the Commission on Higher Education and the Adult Learner and is used in this manual with permission of the principal author. The views expressed are the authors' and do not necessarily reflect the opinions of the Commission. In this article, "university" is used in its generic sense to include both colleges and universities.

specialized kind of adaptation or "final stage" in which a college or university has fully adapted to the large-scale presence of adults within its organization. Second is the focus on the transition process by which universities and colleges move from the intermediate stage to full adaptation to adult needs and interests. This part of the paper will emphasize especially the organizational processes necessary for the change and, at times, will move from purely observational and descriptive (albeit informal and non-rigorous) statements to relatively proscriptive and judgmental statements about what should be done to make the adaptive process flow smoothly if not painlessly.

Before launching into this process, however, a minor demurrer should be offered. As stated, the paper will be examining a developmental process, a process by which universities adapt and modify themselves in relation to the new presence of large numbers of adults in their midst. At times, it may sound as though the final stage in this process is a goal to be sought, an ideal condition toward which **all** colleges should strive. Obviously, that is not intended. Depending on the individual institution—its mission, history, and physical location—various stages of the adaptive process will be appropriate and "right" at various times. For some colleges, a fairly primitive stage of adaptation, referred to here as the **laissez-faire stage**, may be "right."For another, the second or **the separatist stage** may be appropriate. And for yet another, anything less than a full **equity stage** may be wrong. Moreover, as with any developmental process, virtually any college or university may show varying degrees of development along varying axes of measurement. A college may have developed into a final stage of adaptation along one dimension while still retaining a comparatively primitive level along some others. A college may have developed excellent procedures for recruiting, admitting, and teaching adults while still having a fairly crude or even non-existent system of providing services. Much of the paper will be aimed at the process of achieving full transition into stage three, the equity stage, and will be directed primarily towards institutions under the heavy impact of large numbers of adults and, thus, are feeling strong pressures to adapt and modify toward a final or equity stage. In no small measure, these pressures are merely an extension of the civil rights movement, the notion that all citizens have equal rights to services for which they pay, either directly (taxes) or indirectly (through participation in the economy which supports endowment funds), and thus they often have a moral, constitutional or legal dimension to them. However, the basic point is that the process of growth into an equity model for adult students is not in any real sense a moral or necessary obligation but is simply an inevitable process of development which at least some universities should go through when adult students achieve a certain level of importance.

DEVELOPMENTAL STAGES

Stage 1. The "Laissez-Faire" Stage

For most institutions attempting to cope with an influx of adult students, the first stage is simply to remove any barriers or artificial constraints on adults (e.g., age requirements for admission, required parental consent forms, etc.) and, thus, to let the adults do the best they can within a system that works neither for them nor against them. This is a **laissez-faire** stage in that adults are allowed to be as entrepreneurial and aggressive as they choose to be in dealing with the institution, but there is no official or organized administrative intervention. Typically, at this stage an institution will have the following characteristics with regard to adult students:

- no active recruitment
- no special support services
- no curriculum development efforts specifically for adults
- no institutional planning which takes adult needs into account
- no faculty development efforts for dealing with adult students
- an overall institutional assumption that students' problems are specific to their role as students, regardless of age.

Stage 2. The "Separatist" Stage

Because the basic assumption that age is a non-significant variable in student needs and problems is radically false, any institution that deals for long or in substantial numbers with adult students will probably move toward the next stage of development. This is the **separatist** stage in which adults are essentially segregated from the major student body and given separate, specifically developed programs which, while better than none, are given demonstrably lower priority and status than the traditional ones. Moreover, within this stage, it can be argued that adult students become subject to a certain degree of economic exploitation or, at least, that their services and programs are measured by different academic and fiscal yardsticks than traditional programs. Academically, they are too often weaker services while, fiscally, the institution expects them to operate with substantially less general fund support than is given to programs for younger students. Other characteristics of this stage include:

- a clearly segregated and identified adult or evening unit
- a separate faculty for this evening unit consisting of adjunct or part-time faculty and some regular faculty employed separately in the adult unit
- limited transferability of credits from the adult or evening program to the "regular" program
- limited or tightly controlled process for evening students to take day classes and for day students to take evening classes
- different programs and degree requirements within day or regular programs and evening or adult programs
- separated and different services (registration, scheduling, admissions, advising, etc.) for adult students
- limited non-instructional student services for adults
- low status for administrators of adult programs as reflected in limited or no access to university policy-making processes.

Stage 3. The "Equity" Stage

A university or college that lives for very long with the separatist model will soon begin feeling the inherent contradictions and paradoxes that develop when two groups are given "separate but equal" treatment. Soon, they will feel the need for equity, meaning an active use of the principles of justice and fairness to correct inequities in a system that *de facto* discriminates against one group in favor of another. As soon as it begins attempting to treat adults fairly and to give them the same quality and quantity of service as it gives younger students, an institution has begun to evolve toward the final or **equity** stage of development. Perhaps, with the exception of a handful of "non-traditional" and mostly brand-new institutions, no fully developed equity stage colleges or universities now exist in this country. However, some universities have moved so far beyond the separatist stage that the characteristics of a full-fledged equity institution can be clearly discerned, at least in nascent form, and the characteristics of such a fully developed equity model institution can be listed with a good deal of confidence. They include:

- active recruitment of adult students
- appropriate delivery systems for adult learning included as part of the general instruction system of the institution
- fully integrated curriculum, i.e., one in which adult courses and "regular" courses are the same and in which students from both age groups mix comfortably
- fully integrated faculty, i.e., a faculty for whom evening or adult classes are a usual part of the regular teaching load
- faculty development programs to improve teaching for both adults and younger students
- provision for degree credits by prior learning (CLEP, military education, etc.) within both "regular" curricula and any special adult programs

- administrative services such as registration and financial aid and information are made available by phone, mail, etc., and during evenings and weekends, within the context of the appropriate unit, rather than separately
- academic advising available on weekends and evenings
- personal counseling, financial advising, career counseling, and other student services available in the evening and responsive to adult problems
- appropriate admissions criteria and procedures for adults
- support services (day-care, peer-counseling, orientation sessions, etc.) for adults
- senior policy-making bodies of the university aware of adult students (it is important that these include fully-empowered administrators representing adult student concerns)
- university administrative policy and procedures developed and implemented with a full range of students, including adults, in mind
- administrative policy and practice is proactive rather than reactive in its mode of dealing with adult students, their needs, and their problems.

THE PROCESS OF DEVELOPING AN EQUITY INSTITUTION

Change is never easy, and growth is always incremental. Both people and organizations always adapt to the present by building on a foundation of behaviors and structures developed in the past. Thus, change is generally uneven, coming rapidly and easily in one growth area but slowly and with difficulty in another. But change does happen. Separatist systems which worked in 1960 may have become counterproductive by 1980, and an institution will necessarily try, with varying ease and degrees of success, to adapt the non-functional systems and to develop better ones.

This part of the paper will reflect on the institutional growth process and identify ten key development points which are central to the evolution into an equity model. Keeping these processes in mind can facilitate change where it is occurring and, at least, make the evolution more comprehensible if not less painful.

1. When a university has developed a substantial adult constitutency it should modify its mission statement to clearly express a commitment to adults and should have this change fully understood and endorsed by the governing board.
2. The president and his executive staff, especially the chief academic officer, must clearly, frequently, and consistently articulate the university's commitment to adults when dealing with university employees, to include not only the deans but especially the faculty and the administrative staffs of the central administrative units.
3. University long-range planning must consistently address the needs of adults as a major constituency of the university.
4. The president and key members of the governing board must consistently work to develop a personal and institutional philosophy which emphasizes a commitment to serve and educate adults as equal members of the academic community rather than as a market to be exploited in support of the university's "real" mission, i.e., to prepare youth to enter the world.
5. At the academic policy level, the institution must clearly and thoughtfully address the difference between "traditional" or "conventional" requirements for admission, transfer, and (especially) residency and the "real" or functional requirements necessitated by the academic programs. In other words, the university will surely recognize that while any academic program requires a certain amount of intensity and continuity not every program requires that students spend two consecutive semesters of full-time study in order to meet the program's educational goals. The distinction between "conventional" and "real" requirements can be crucial in forming academic policies supportive of adults.

6. The university will need to develop policies regarding scheduling of classes and teaching loads which place significant emphasis on student need and interest as well as on faculty preferences and administrative convenience. In other words, courses must be scheduled in times and places, including evenings, weekends, and off-campus locations, where adult students can get to them, and yet where there is no diminution of academic quality or credibility. This process must be made part of the regular class scheduling procedure.
7. The academic rules and regulations must be made responsive to adult students' needs for streamlined bureaucratic procedure and, more importantly, they must actively attempt to seek equity in the application of rules to students of varying ages and circumstances. In other words, the process of establishing academic rules and regulations must recognize that a "reasonable and fair" rule for a resident nineteen-year-old may be "unreasonable and unfair" for a 38-year-old housewife. Therefore, the regulation process itself must seek to build an equitable means for applying rules differently but fairly to various students.
8. The university must recognize that adult students operate in different time-frames from traditional students and, thus, require longer, later operating hours for many university functions. The university must identify offices and functions which adult students need and extend the operating hours of appropriate offices and services.
9. As part of its overall managerial practice, the university needs to develop evaluation and objective-setting processes which speak specifically and uniformly to identifying and meeting the needs of adults. When, for instance, the registrar's office evaluates its performance and sets its objectives it should include specific objectives concerning adult students' registration needs. Similarly, all other administrative and academic units must address questions of adult needs in terms of goals and performance standards.
10. Student services, from the top-level down, must develop processes and positions having specific responsibility and authority for identifying and meeting the service needs of adults. In each area of student services, the needs of adult students must be addressed consistently and equitably with the needs of younger students.

CONCLUSION

This list of developmental processes could be expanded substantially. It gives, however, a significant indication of the kinds of changes which occur as institutions develop from a separatist stage into an equity stage of dealing with adult students. It is not an easy or simple growth process; it is a complex and difficult one. It involves, finally, virtually all aspects of the university's structure and function, from the board right down to the clerks and the typists. It is a process which modifies, over time, not just part of the institution but the entire institution.

Perhaps the easiest way to summarize the change is to lift some words from the final report of the Carnegie Commission on Non-Traditional Study. The words they use to define non-traditional study can be applied equally to the operating style and institutional philosophy of an equity stage university. When it has achieved an equity stage of development, the institution

> ...puts the students first and the institution second, concentrates more on the former's need than the latter's convenience, encourages diversity of individual opportunity rather than uniform prescription, and de-emphasizes time, space and even course requirements in favor of competence, and where applicable, performance. It has concern for the learner of any age and circumstance, for the degree aspirant as well as the person who finds sufficient reward in enriching life through constant, periodic, or occasional study. (*Diversity by Design*. San Francisco; Jossey-Bass, 1973, p. xv).

A CHALLENGE

Jerrold E. Kemp
Coordinator, Instructional Development Services
San Jose State University

Wouldn't it be great if instruction could take place like this—

Classes are limited to 12-15 students who are highly-motivated and well-prepared. Each class is scheduled at your preferred time. You have a teaching assistant to help with details and to handle the class when you need to be away. As you find it necessary, you lecture, use seminar techniques, or instead of meeting the class, assign project work.

Need we go further with this dream!

Such an ideal situation may exist in some graduate programs. But in undergraduate education most professors face large-enrollment or regular-size classes comprised of students with a range of abilities, varied background preparation, and different levels of motivation. In addition, the content you must repeatedly teach can offer you little intellectual challenge, while the amount of subject matter you must cover continues to expand.

How can you approach the ideal situation described in the first paragraph within the actualities of the real academic world outlined in the second paragraph?

Before suggesting an answer to this question, let us identify some important reasons for why most of us initially entered this profession of teaching in higher education. They bear directly on how you approach your teaching and the results you can derive from it.

- Intellectual stimulation inherent in teaching and pleasure of interacting with students
- Satisfaction of organizing and then communicating knowledge in your discipline to students
- Gratification of guiding students in successful accomplishment of learning goals you set for them
- Opportunities to pursue interests in research, writing, public service, and consultation

In order for you to satisfy these needs, you should examine how you might better handle the various aspects of the teaching process. Ask yourself such questions as these:

- Are there better ways to organize my subject content so the structure will be logical and clear to students?
- How can I find out more about my students—their interests, needs, academic background, and preparation for my course?
- Then, how can I use this information to better motivate and guide students to learn?
- How can I give more attention to individual students within the framework of large enrollment classes?
- Are there alternatives to conventional lecture-discussion-homework-examination procedures that can help me do a better job and give me more satisfaction in my teaching?
- In what ways can I better use newer technologies for instruction and to assist students in their learning?

As you search for answers to the above questions, many new ideas and innovative practices should become evident to you. There are numerous opportunities to modify traditional instructional methods and student groupings so as to approach the ideals described in the opening paragraph of this article. For example, available resources now allow us to make group instruction more dynamic and individualized instruction more effective. The result can be a change in your role from being primarily a dispenser of information to a person who guides and counsels students. These are more humane functions for you and for students.

What is needed first is an awareness that change in instructional practices for many courses has become necessary. Then second, to implement a systematic plan for assessing needs, setting priorities, and considering new instructional methods. The process by which we examine, and relate the various aspects of teaching that can lead to more effective and rewarding instruction is called instructional design.

The instructional design process is built around answers to these four questions:

1. Who are the students I must teach?
2. What learning objectives should I establish for each topic or unit?
3. What instructional methods can be used to accomplish the objectives?
4. How should student learning be evaluated?

These four basic elements—student characteristics, learning objectives, instructional methods, and learning evaluation—are the framework for systematic instructional planning. In addition to these key elements, there are other components which often require attention. They include carefully organizing subject content for the objectives treating each topic, selecting resources to support instructional activities, and specifying support services like facilities, equipment, personnel, and budget to carry out the instruction.

When all elements are carefully integrated, a complete instructional design plan is developed. Space does not permit a further explanation of the details and procedures for applying this instructional design process. For reference, see The Instructional Design Process by Kemp (Harper & Row, 1985) or other books on the subject by Gagne/Briggs/Wager and Dick/Cary.

Professional assistance and guidance may be necessary in following a plan for selecting and implementing new instructional methods. On most CSU campuses, there are personnel who serve as qualified "instructional designers." Such an individual can assist you to examine a course for modification, to initiate a new course, and to carry out the necessary planning steps and their implementation. In addition, the CSU Center for Innovative Programs provides such a service, especially for inter-campus course projects.

Funds are available from various sources that can be used for reassigned time, for professional and technical assistance, and for the purchase of resources and services to support either minor or major instructional design activity.

By systematically applying the elements of an instructional design plan, the following can occur:

- Learning experiences can be more meaningful and interesting so that students will be motivated to continue with their studies.
- Satisfactory learning can take place at an acceptable competency level for the majority of students.
- Positive professional experiences can be achieved through this planning, implementation, and evaluation process.
- Instruction can be accomplished with due regard for reasonable expenditures of money and time.

Find out and try out how the process works and the benefits to be derived for yourself and for your students.

Good luck.

Have Learning Begin with Your Lesson Objectives:

Guide Learning with Objectives that Take a Student's Perspective

by Ronald E. Dodge

What am I going to be able to do after I finish this lesson? This is a question every lesson objective should be able to answer. So, if a lesson has objectives, there should be no problem finding out what the lesson is about. Right?

Well, not always. When you look at the way some objectives are written, it seems that they exist only because they're "supposed" to be somewhere. After all, haven't we learned that "lessons need to begin with objectives"?

Some people believe this, so when they write a lesson, they make sure they have objectives. It doesn't matter if anyone will ever read them. They're there because they're supposed to be. It's the correct thing to do.

Well, it's true: Lessons do need objectives. But beginning them with objectives doesn't guarantee that the objectives are going to do anything useful, that they are going to guide any learning, or that they are even going to be read.

To have learners pay attention to them, objectives need to be written from the learner's perspective. They need to be written so that they clearly tell people what they are going to be able to do. If they are written this way, they will be read, they will serve a purpose, and they will become useful to the learner. It's as simple as that. Well, how do we get useful objectives? And how does this differ from what we've been told all along?

A Well-Written Objective

Exactly what is a well-written objective? We've been taught that an objective has three parts:

1. A statement of *givens* to let students know what will be available to them when they begin.
2. A measurable *behavior* or action – something learners do that can be observed.
3. *Criteria* which specify exactly what constitutes successful completion of that action.

With all these components in place, there should be no problem for anyone reading the objective. Right?

Well, again, not exactly. Unfortunately, some trouble can, and often does, occur. It begins when the writers of objectives leave out *the* important ingredient: a student perspective. What happens is that objective writers forget to consider the student's point of view as they try to write an objective that includes all the givens, behaviors, and criteria. This often results in something that's difficult to understand.

Here's one example:

> Given a problem with a modem interface and the appropriate documentation, the student will be able to correctly perform the steps necessary to troubleshoot the malfunction to a failing circuit board so that, after replacing the failing board, a "pass complete" indication may be obtained from diagnostic software.

This objective contains the three parts every good objective should have. From an academic standpoint, it appears sound. It certainly describes something someone is supposed to do. But the problem is that it's hard to understand. Even though it has all the proper components, it fails to serve the needs of a learner. It fails to guide learning.

The problem with our example is that the behavior to be learned is buried within the wording of the objective. Somewhere between what is stated as a given and what is specified as criteria, is a behavior someone is supposed to accomplish. It didn't get buried intentionally. It was something that happened as the writer of the objective concentrated on constructing a good, three-part objective. The person just thought more about getting the three parts together than describing a behavior to be learned.

Take another look at the objective used in our example. It's one you might actually find being used in computer training. What does it say? Well, after several readings, it becomes apparent that it has to do with troubleshooting a modem interface problem. (A modem interface is part of a computer communication system.) The desired behavior is to find a circuit board that's causing the interface to fail and replace it. To start out, students will be given the problem and the documentation they need to locate it. The criteria for demonstrating that the interface has been successfully fixed is to run diagnostic software and get a "pass complete" indication.

All this was interpreted after several readings and a little head scratching. This involved more time than the average student would probably want to invest. (Most would rather do better things like get on with the lesson at hand.)

Rules for Better Objectives

What follows, then, are seven rules to help you avoid problems like this. These guidelines will not only help you write better, more understandable objectives, but they will also help you develop a learner-orientation toward objective writing. Instead of first considering the basic elements of an objective and then writing accordingly, these guidelines will have you first consider how to convey a desired behavior to someone – and then write accordingly.

Let's see how.

Because we are interested in writing an objective from a learner's perspective, how about taking out the phrase "the student will be able to"?

Rule 1: Drop the phrase, "the student will be able to."

This may, at first, seem inconsistent. If we are trying to adopt a student perspective, why should we take out the reference to students? Well, by doing so, the objective begins to sound more like a direction and, therefore, begins to provide direction. It gets away from dealing with a "third person." Instead, it tells you what *you* are going to do.

This is the result:

> Given a problem with a modem interface and the appropriate documentation, correctly perform the steps necessary to troubleshoot the malfunction to a failing circuit board so that, after replacing the failing board, a "pass complete" indication may be obtained from diagnostic software.

Good. We are beginning to get some direction. Now, let's try something else.

Rule 2: Define normal or "given" conditions at the start of the training.

If it's normal that appropriate documentation will always be provided for each performance, then it's only necessary to specify the exceptions to this rule – the times, for example, when the documentation won't be made available. It's sufficient to explain to students when they start training that they will always have the documentation they require – unless an objective tells them otherwise.

Once we do this, people start paying more attention to objectives:

> Given a problem with a modem interface, correctly perform the steps necessary to troubleshoot the malfunction to a failing circuit board so that, after replacing the failing board, a "pass complete" indication may be obtained from diagnostic software.

This sounds better, but there's still a lot that may be done to improve the objective.

Rule 3: There is no need to specify that things should be done "correctly."

It should be understood that the objective needs to be completed correctly or successfully. After all, it doesn't make sense to try to do something incorrectly or unsuccessfully. Otherwise, why do it at all?

This gives us:

> Given a problem with a modem interface, perform the steps necessary to troubleshoot the malfunction to a failing circuit board so that, after replacing the failing board, a "pass complete" indication may be obtained from diagnostic software.

Not bad, but it's still awfully wordy.

Rule 4: Use as few words as possible.

"Perform the steps necessary" is a phrase that is unnecessary and can simply be left out. Scrutinize the words you use in objectives as if you had to personally pay for them.

> Given a problem with a modem interface, troubleshoot the malfunction to a failing circuit board so that, after replacing the failing board, a "pass complete" indication may be obtained from diagnostic software.

Rule 5: Translate words of many syllables into words of fewer syllables

It's amazing what can be accomplished with simple language. "Troubleshoot the malfunction" can be translated into: "Find and replace the failing circuit board."

We now have:

> Given a problem with a modem interface, find and replace the failing circuit board so that a "pass complete" indication may be obtained from diagnostic software.

So far, so good. This is almost fun.

Rule 6: Begin every objective with an action verb.

The trouble with putting the word "given" at the start of an objective is that it tends to act as another obstacle for anyone reading it. It's something that has to be read through or around until the action verb is finally reached. After dropping the given, we are left with an objective that gets to the point a lot sooner. It immediately tells people what they are going to do. It begins with the expected behavior. No waiting.

This is what we get:

> Find and replace the failing circuit board in a modem interface so that a "pass complete" indication may be obtained from diagnostic software.

Now, that's nice and clear. But it may still be a little too much to swallow all at once.

Rule 7: If necessary, use more than one sentence to write the objective.

No one ever said that objectives had to be written as one sentence. In fact, two (or three) simple sentences are better than one long, complex sentence. In our example, a second short sentence can be used to specify the criteria:

> Find and replace the failing circuit board in a modem interface. Obtain a "pass complete" indication from diagnostic software.

Nice!

So there you have it: an objective that is clear, and concise. Because it is written as an instruction, it helps begin the instruction. It gives direction to learning. And, isn't that what objectives are supposed to do?

Ron Dodge is the Curriculum Analyst for NCR Comten, Inc. He has over eight years' experience in technical instruction and course development. As a curriculum analyst for NCR Comten, he conducts needs assessments and does program evaluations. **Address:** *NCR Comten, Inc., 2700 Snelling Ave. N., St. Paul, MN 55113.*

By Michael W. Galbraith

Essential skills for the facilitator of adult learning

A vast number of individuals help adults learn in a wide variety of formal and nonformal educational settings such as universities, community colleges, vocational/technical institutes, businesses and industries, correctional institutions, churches, museums, voluntary organizations, community action agencies, armed forces, and a litany of others settings too numerous to list. Those helping adults learn carry such labels as facilitator, mentor, teacher, instructor, trainer, or adult educator. For the purpose of this article, the term facilitator will be used to refer to those individuals who help adults learn. Helping adults learn is a transactional process in which the facilitator interacts with learners, content, other people and material to plan and implement an educational program. The facilitator is in a sense a guide to learners who are involved in an educational journey. Knox (1986, p.xi) suggests however, that most facilitators "in adult education programs are expert in the content they teach, but they usually have little preparation in the process of helping adults learn".

This article will examine some of the essential skills needed by the facilitator to effectively help adults learn. First, general characteristics of an effective facilitator will be detailed as well as how interpersonal skills influence the teaching and learning transaction. Next, instructional planning skills that a facilitator should possess will be noted. Finally, teaching and learning transaction skills necessary to bring about effective learning will be provided.

General Characteristics and Interpersonal Skills

Being technically proficient in the content area in which the instruction is being directed is paramount, as are the abilities to plan and administer educational programs. The facilitator must also possess personality characteristics and interpersonal skills that engender an image of caring, trust, and encouragement. Merge these desired characteristics together and an effective and meaningful experience can result, both for the facilitator and the learner.

A list of general characteristics and exemplary principles for instruction and practice has been noted in the literature. Knox (1980) suggests that a facilitator of adult learning should possess three areas of knowledge: knowledge of content, knowledge of learners, and knowledge of methods. The personality characteristics of the facilitator should suggest a sense of self-confidence, informality, enthusiasm, responsiveness and creativity. Apps (1981) found that the best qualities for a facilitator were those that showed an interest in students, possessed a good personality, had an interest in the subject matter, had the ability to make the subject interesting, and were objective in presenting subject matter and in dealing with learners. Draves (1984) echoes similar agreement by stating that an instructor of adults must have understanding, flexibility, patience, humor, practicality, creativity, and preparation. Acquisition and acceptance of these diverse characteristics suggest that an effective facilitator plays many roles within the teaching and learning transaction including role model, counselor, content resource person, learning guide, program developer, and institutional representative (Apps, 1981; Brookfield, 1986; Daloz, 1986).

Knowles and Associates (1984) identified seven components of andragogical practice (the art and science of helping adults learn) that suggest the skills and abilities a good facilitator should possess. The andragogical approach indicates that a facilitator must possess both technical and interpersonal skills to be effective. Central to the success of this approach are the personality characteristics and interpersonal and human relation skills of the facilitator in relationship to the adult learner.

Brookfield (1986) provides six principles of effective practice and indicates particular beliefs and characteristics associated with the facilitator of adult learning. Implicit in his framework are general characteristics and guiding principles of an effective facilitator in relationship to helping adults learn. It suggests that a facilitator should have an understanding of adult learners, provide a climate conducive to learning, provide a contextual setting for the exploration of new ideas, skills, and resolutions, provide a forum for critical reflection, and have the ability to assist adults in the process of learning how to change their perspectives, shift their paradigms, and replace their way of interpreting the world. Implementation of these principles requires the facilitator to be technically proficient in content and instructional planning areas as well as highly competent in interpersonal and human relation skills.

The attributes of caring and respect appear as central characteristics necessary to the success of the facilitator of adult learners as well as to the total process of helping adults learn. To develop a conducive instructional and learning climate, a high level of interpersonal and human relation skills is essential. Daloz (1986, p.xvii) states that the "element of good teaching becomes the pro-

---

Michael W. Galbraith is an Assistant Professor of Adult Education at the University of Missouri-Columbia, Department of Higher & Adult Education & Foundations.

Lifelong learning: An omnibus of practice and research, Vol. 12, No. 6, 1989.

vision of care rather than use of teaching skills and transmission of knowledge."

Recognizing that caring, listening, and passion are powerful elements and the capacity to provide emotional support when it is needed are hallmarks of a good facilitator of adult learning. One could conceive of the interpersonal relationships that exist between the facilitator and adult learner as being connected by a gossamer thread that weaves itself throughout the various characteristics of each person involved in the learning experience. The thread is fragile that connects the facilitator and learner relationship and when poor interpersonal skills are exercised it snaps and tears apart. Developing and maintaining good interpersonal and human relationship skills is therefore vital to the facilitator of adult learning.

Instructional Planning Skills

Being technically proficient in the planning process of educational programs for adult learners is an essential component in the process of helping adults learn. Planning an educational program for adult learners is not a series of independent steps or processes, but an interactive and interrelated system. In this section, the instructional planning components of needs assessment, context analysis, objective setting, organizing learning activities, and evaluation, and the skills associated with each, will be briefly examined.

Needs Assessment

A needs assessment should identify the gaps between the learners' current and desired proficiencies as perceived by the learner and others. Needs assessment methods can range from highly informal and intuitive to highly formal and in-depth analysis (Cameron, 1988; Grotelueschen, 1980; Zemke & Kramlinger, 1982). Facilitators can decide to use a variety of data-collection procedures such as individual interviews, questionnaires, tests, observation checklists, self-assessment diagnostic instruments, surveys, performance analysis, or marketing analysis techniques to assess the most appropriate educational needs. As suggested, there are numerous methods for identifying learning needs, however, there is no consensus on the most appropriate method. The selected method will generate different types of information depending on who is involved in the assessment.

Acquiring skill in the needs assessment process can help facilitators of adult learning review their assumptions about the educational needs of potential participants. It can assist them in being responsive to the adult learner through appropriate selection of topics and materials. It can increase the likelihood that potential participants will participate if program descriptions emphasize the responsiveness to the educational needs identified, and, it can encourage adult learners to persist, learn, and apply what they learn if the program focuses on meeting their needs (Knox, 1986). The assessment of needs should be an ongoing process throughout the instructional planning activity in an effort to ensure that individuals' educational desired outcomes are congruent with intended course outcomes.

Context Analysis

Context analysis considers the societal trends and issues, the resources, the mission of the provider organization, and how it influences the process of helping adults learn (Knox, 1986). As a facilitator it is important to understand the impact of these influences on the learner and on the instructional process. Adult learners have perceptions of standards, expectations, and opportunities that are directly related to their purpose for being engaged in the enhancement of their proficiency level. Understanding these perceptions allows the learner and facilitator to contribute to the decisions on "using learning activities to strengthen problem-solving, specifying mastery levels, and helping learners use educational strategies that enable them to use or deflect influences that encourage or discourage them to learn and apply" (Knox, 1986, p.67). The contextual influences affect the facilitator and the adult learner and the decisions that can be made in a collaborative manner.

An understanding of the organizational mission, resources, priorities, trends, and constraints is essential when making decisions and arrangements for an educational program. Recognition of the various contextual influences of the organization can lead to planning and implementation of programs that are more likely to be successful and lead to a more meaningful and rewarding educational experience for the participants and the facilitator.

Setting Educational Objectives

Selecting and setting educational objectives should draw heavily from the needs assessment and context analysis information. How do you select educational objectives that should receive high priority? Knox (1980, 1986) proposes several useful procedures for setting objectives including using planning committees composed of participants, resource persons, and program coordinators, having all participants engage in a nominal group process, obtaining written and oral descriptions of successful practice to highlight intended outcomes, using an existing group of adults who have specified goals and develop an educational program with them, providing program time to agree on the objectives, and using reaction forms to ask participants to periodically identify the objectives that are most important and least important to them which can serve as a basis for modifying the program and educational objectives. Selecting and setting educational objectives should be a joint venture among the key players in the learning activity.

Setting objectives should be an ongoing and interactive process. Opportunities to modify the objectives must be present as the educational activities unfold since it is impossible to identify all the unplanned and unanticipated learning needs of the adult learner. Utilizing a collaborative approach to agreeing on the learning objectives, adult learners can increase their understanding of and commitment to achieving the objectives, understand the relationship between current and desired proficiencies, reflect on questions that need addressing, and acquire a framework for learning how to learn beyond the present program (Knowles, 1980; Knox, 1980; Smith, 1982). Facilitators can use the agreed upon learning objectives to help in the process of selecting materials, outlining content, deciding on methods of teaching and learning, and preparing evaluation procedures (Knox, 1986).

Organizing Learning Activities

The information and decisions that were made from the needs assessment, context analysis, and objective setting activities result in the identification of the intended outcomes for the educational program. The facilitator must now have the skill to select and organize learning activities that will meet the intended outcomes.

The way that learning activities are selected and organized must be rational and based on the educational objectives, the adult learners' characteristics, as well as on the facilitator's own perspective and experience. Knowledge of the current proficiency levels and the preferred learning styles of the learners will aid in the selection of the most appropriate learning activities. The facilitator can develop a list of competencies that have been identified for the educational program and ask participants to check on a Likert-type scale the level at which they believe they are presently performing.

In terms of learning style preference, asking participants how they like to process information and what methods they like to use in that process is one easy and rather quick method of acquiring information (Galbraith, 1987). Analyzing the feedback can assist the facilitator in the selection of the most appropriate learning activities.

Selecting appropriate teaching and learning methods is also an important skill the facilitator must possess. A vast array of methods exist and each one is influenced by the content that the facilitator is teaching, the program and learning objectives, the desired outcomes, the characteristics of the learners, the size of the group, and the availability of time, equipment, facilities, and budget (Galbraith, 1989). The facilitator also needs skill in selecting and preparing educational and instructional materials.

The primary criteria for selecting materials should be the educational purposes they serve in conjunction with the learners' needs and learning styles. In selecting from the available materials, the facilitator should be concerned with how the materials help the learners meet the program objectives, and how appropriate and responsive the materials are considering the learners' background, current levels of proficiency, and motivation (Wilson, 1983). Many materials that are useful in helping adults learn are already available for purchase, however many times the need arises for the facilitator to develop new materials that better fit the educational purpose of the program, learners' backgrounds and interests.

Evaluation

Program evaluation procedures can help determine if the participants in the learning activity reached their educational objectives and desired outcomes. They can be used in the planning process and for program improvement, and they can be used for program justification and accountability (Grotelueschen, 1980). One single evaluation procedure will not provide the facilitator with useful information about all aspects of the program (Deshler, 1984). Therefore, it is important to focus on specific components of the program about which evaluative data is desired such as needs, objectives, learning activities, participants, materials, facilities, and so forth.

Depending upon the resources, time, money, audience, purpose, and desired information, the facilitator can select evaluation data from various sources such as standardized tests, observation checklists, questionnaires, organizational records, interview guides, self-assessment inventories, and anonymous participant reaction forms. As with other components of helping adults learn, the adult learners must be actively involved in the evaluation process that is hopefully "grounded in, and derived from, some central features of adult learning" (Brookfield, 1986, p. 276). Facilitators are one of the main users of the evaluative findings, therefore, such findings can aid in their own improvement as a facilitator.

Teaching and Learning Transaction Skills

The teaching and learning process involves an understanding of adult learners, instructional planning, and an awareness of our own content expertise. In essence, it is how we as facilitators influence our adult learners and how they influence us in the process of helping them learn. To bring this about, facilitators need skills in building supportive and active educational climates and skills in providing challenging teaching and learning interactions.

The Educational Climate

An educational climate consists of two major components, the physical environment and the psychological or emotional climate. The physical environment should encourage the adult learners to participate. Facilities should be as attractive and comfortable as possible with good lighting and ventilation, colorful decor, appropriate temperature settings, a public address system (if in a large room), availability of refreshment canteens for breaks, and an absence of distracting sounds from outside the classroom. Utilizing tables and chairs, with five or six chairs to a table, is preferred by most adult learners. Arranging the tables and chairs into small circles or into a semi-circular arrangement allows active face-to-face communication with the facilitator and each learner, increases participation, and enhances the adult learning situation (Vosko, 1984).

The establishment of a psychological climate is also imperative. The first session of any educational program is vital and it is here that a climate for learning must be established that is supportive, challenging, friendly, informal, open, and spontaneous without being threatening and condescending (Knox, 1986). Facilitators should introduce themselves in a way that says "I am human and I want to assist you in an open, collaborative, and supportive manner." Having participants introduce themselves with some personal and professional information as well as reasons for participating in the class will help the facilitator gain valuable information but also help other participants realize that perhaps they are here for the same reasons. Facilitators also need to review the goals, objectives, and expectations of the program with participants and obtain feedback from them results of which may indicate that certain modifications may be necessary.

Adult learners are very capable of being involved in the planning process and should be given the opportunity. Building a climate of mutual respect, collaboration, mutual trust, support, and authenticity provides a strong psychological climate that is conducive to learning.

Providing Challenging Teaching and Learning Interactions

The teaching and learning interaction suggests that the facilitator and the adult learner are engaged in an active, challenging, and supportive encounter. Providing challenging interactions requires an understanding of the instructional planning process, adults as learners, motivation strategies, and an understanding of one's philosophical and teaching style orientation to bring about a conducive educational activity (Galbraith, 1989).

How can facilitators bring about challenging and meaningful interactions? First, facilitators need to care enough to maintain standards and have high expectations for the adult learner. Daloz (1986) suggests that teaching is an act of caring and the promotion of development. Facilitators must care enough about adult learners to set up challenging tasks that call out for closure, while at the same time provide insight into how this new knowledge can be applied to their lives. In addition, providing realistic and varied practice opportunities will help adult learners persist and to apply what is learned. Facilitators should subdivide and sequence learning tasks from simple to more complex and establish a pace for learning that allows for individualization. A continuous process of feedback about how the learning activity is progressing is also essential (Knox, 1986). Finally, facilitators must provide reinforcement for satisfactory performance and make note of exemplary accomplishments.

Next, the need to develop and organize educational settings that demand the adult learners and facilitators to act and think critically and reflectively is imperative (Brookfield, 1987; Marsick, 1987; Schon, 1987). Brookfield (1987, p.1) suggests that this "involves calling into question the assumptions underlying our customary, habitual ways of thinking and acting and then be ready to think and act differently on the basis of this critical questioning." Central to helping adult learners think critically is the element of challenge. Challenge, according to Egan (1986), is the last stage necessary before an individual can develop alternative ways of thinking and acting. Facilitators can use various strategies to assist in the development of critical thinking such as critical questioning, critical incident exercises, criteria analysis, role playing, and crisis-decision simulations.

A meaningful teaching and learning transaction suggests that it must promote development, for the adult learner and for the facilitator. Daloz (1986, p.237) summons up what seems to reflect the most desirable outcome of the teacher and learner interaction by stating, "like guides, we walk at times ahead of our students, at times beside them, and at times we follow their lead."

Conclusion

Facilitating adult learning can be a challenging, exciting, and rewarding experience. A basic understanding of various skills can enhance and help guide those involved in this journey. Essential for the facilitator of adult learning is the development and acquisition of interpersonal skills, instructional planning skills, and teaching and learning transaction skills. Acquiring these essential skills allows the facilitator and the adult learner to promote meaningful development and growth. AAACE

REFERENCES

Apps, J. (1981). *The adult learner on campus.* Chicago: Follett.

Brookfield, S. (1986). *Understanding and facilitating adult learning.* San Francisco: Jossey-Bass.

Brookfield, S. (1987). *Developing critical thinkers.* San Francisco: Jossey-Bass.

Cameron, C. (1988). Identifying learning needs: Six methods adult educators can use. *Lifelong Learning: An Omnibus of Practice and Research, 11*(4), 25-28.

Daloz, L. (1986). *Effective teaching and mentoring.* San Francisco: Jossey-Bass.

Deshler, D. (Ed.) (1984). *Evaluation for program improvement.* New Directions for Continuing Education, No. 24. San Francisco: Jossey-Bass.

Draves, W. (1984). *How to teach adults.* Manhattan: LERN.

Egan, G. (1986). *The skilled helper* (3rd ed.). Monterey: Brooks/Cole.

Galbraith, M. (1987). Assessing perceptual learning styles. In C. Klevins (Ed.), *Materials and methods in adult and continuing education* (pp. 263-269). Los Angeles: Klevens.

Galbraith, M. (Ed.). (1989). *Adult learning methods: A guide for effective instruction.* Melbourne: Krieger.

Grotelueschen, A. (1980). Program evaluation. In A. Knox and Associates, *Developing, administering, and evaluating adult education* (pp. 75-123). San Francisco: Jossey-Bass.

Knowles, M. (1980). *The modern practice of adult education.* New York: Cambridge.

Knowles, M. and Associates. (1984). *Andragogy in action.* San Francisco: Jossey-Bass.

Knox, A. (Ed.) (1980). *Teaching adults effectively.* New Directions for Continuing Education, No. 6. San Francisco: Jossey-Bass.

Knox, A. (1986). *Helping adults learn.* San Francisco: Jossey-Bass.

Marsick, V. (Ed.). (1987). *Learning in the workplace.* London: Croom Helm.

Schon, D. (1987). *Educating the reflective practitioner.* San Francisco: Jossey-Bass.

Smith, R. (1982). *Learning how to learn.* New York: Cambridge.

Vosko, R. (1984). Shaping spaces for lifelong learning. *Lifelong Learning: An Omnibus of Practice and Research, 8*(2), 4-7, 28.

Wilson, J. (Ed.) (1983). *Materials for teaching adults: Selection, development, and use.* New Directions for Continuing Education, No. 17. San Francisco: Jossey-Bass.

Zemke, R., & Kramlinger, T. (1982). *Figuring things out.* Reading: Addison-Wesley.

BEST COPY AVAILABLE

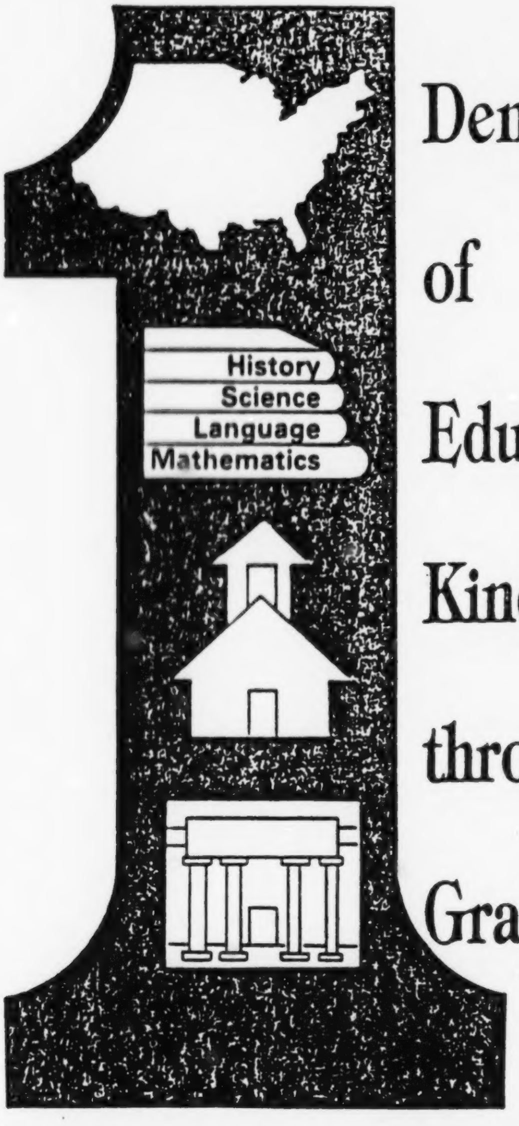
Appendix D
CSU References

All One System

Longitudinal Analysis of Adult Learners and Traditional Students in the California State University System

Adult Learners: A Challenge to Higher Education

All One System


History
Science
Language
Mathematics

Demographics of Education, Kindergarten through Graduate School

by Harold L. Hodgkinson

THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC.

ALL ONE SYSTEM:

Demographics of Education— Kindergarten Through Graduate School

Harold L. Hodgkinson
Institute for Educational
Leadership

Acknowledgments

It is a pleasure to record my debt to Mike Usdan and the Institute for Educational Leadership for intellectual, logistical and moral support. Andrew Krieger was very helpful in assembling materials while Louise Clarke facilitated office matters.

The ideas herein are hardly unique; the relations between them, however, are relatively unusual. Frank Newman, Ed Meade, Scott Miller, Bob Payton, Virginia Hodgkinson, the Forum of Education Organization Leaders, and the Higher Education Secretariat have all contributed to my education. Although the project was supported by the Exxon Education Foundation, and that support is gratefully acknowledged, the responsibility for the content of this report rests with the author.

Harold L. Hodgkinson
Washington, D.C.
June, 1985

ISBN 0-937846-93-7
© 1985
Institute for Educational Leadership, Inc.
1001 Connecticut Avenue, N.W., Suite 310
Washington, D.C. 20036 (202) 822-8405

Cover Design: Christina Laurel

Table of Contents

Page #

Introduction 1

Organization 2

Part One:
Briefing on Major Demographic Trends 3

Part Two:
Retention to High School Graduation 11

Part Three:
Access to College 15

Part Four:
Retention to College Graduation 17

Introduction

In the beginning of this report, it is important to inform the reader of one of the major perceptual assumptions behind it. Almost everyone who works in education perceives it as a set of discrete institutions working in isolation from each other. These institutions restrict the age range of their students:

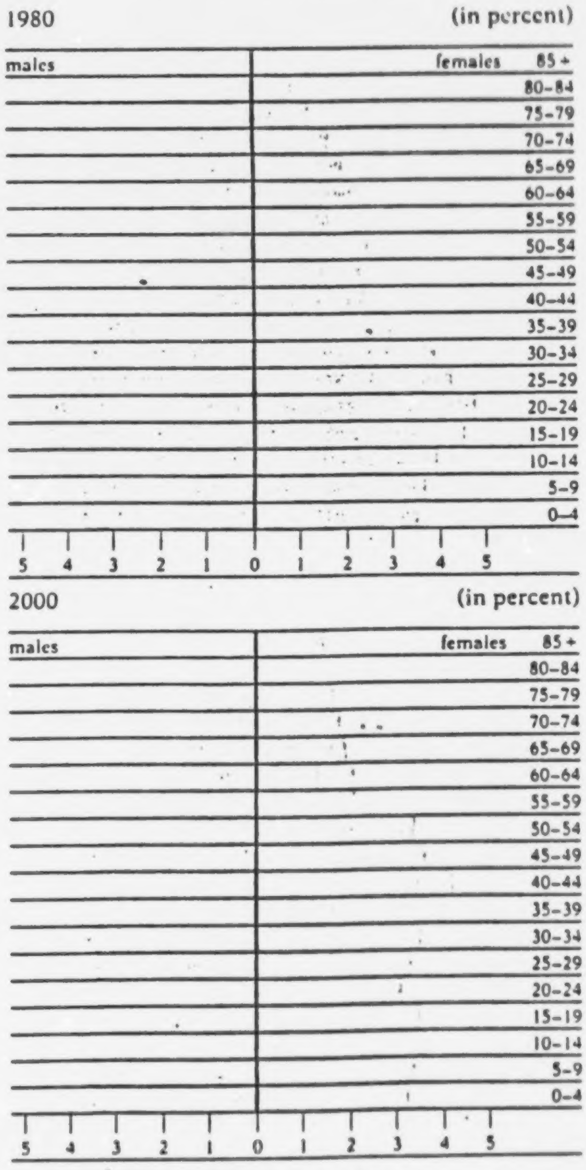
Nursery schools
Day care centers
Kindergartens
Elementary schools
Junior High Schools
Senior High Schools
Two Year Colleges
Four Year Undergraduate Colleges
Universities with Graduate Programs
Post-Graduate Institutions

People working in each of the above institutions have virtually no connection with all the others and little awareness of educational activity provided by the total. Because of this, the school is defined as the unit, not THE PEOPLE WHO MOVE THROUGH IT. The only people who see these institutions as a system are the students—because some of them see it all. Striking as it seems, virtually all graduate students completed the third grade at an earlier time in their lives. It is our conviction that we need to begin seeing the educational system from the perspective of the people who move through it. This is because changes in the composition of the group moving through the educational system will change the system faster than anything else except nuclear war.

This report is mostly about demographics—changes in population groupings in the U.S. This is a relatively new science (Kenneth Boulding says "Of all the social sciences, demographics is most like the science of celestial mechanics"—we look for the huge unseen engines that make social systems work in certain ways). Demographics provides a truly new perception of educational systems as people in motion. By knowing the nature of those coming into first grade in the U.S., one can forecast with some precision what the cohort of graduating high school seniors will be like twelve years later, and can reveal with very little error what the entering college class will look like in the 13th year. Imagine economists predicting the Dow-Jones 13 years ahead!

It is assumed that if people can begin to SEE the educational system as a single entity through which people move, they may begin to behave as if all of education were related. It seems self-evident that such a perception is good. The educational continuum is much like any other. The concept of a food chain in ecology suggests that any alteration in the food chain will affect all the organisms at all points on the chain. Similarly, the Baby Boom of 70 million people born between 1946 and 1964 moved through the education system like a very large mouse going through a very small snake—each educational institution had to expand enormously as the Baby Boom came through, then contract with equal severity as the Baby Boom aged and passed on. Changes as drastic as the Baby Boom now await us.

Exhibit 1
The Baby Boom Ages



(*AMERICAN DEMOGRAPHICS*, JAN. 1983).

Many changes are taking place now in the numbers and composition of the birth and immigrant groups that are beginning to enter elementary schools. These changes will necessarily occupy the educational system for at least the next twenty years. By knowing who is entering the system, and how well they are progressing, everyone at all levels will have time to develop effective programs for the maximum educational gains of all students.

> ***It is our conviction that we need to begin seeing the educational system from the perspective of the people who move through it.***

As a result of such knowledge, we educators may yet begin to think of educators at other levels in the "chain" as colleagues. In businesses, when Sales does well, Research and Development cheers, and vice versa. It is vital to Sales that R&D does well—they need each other's success for the success of all. But when elementary reading scores in big city schools go up (as they have almost universally for the last seven years), one has to listen very carefully before it's possible to discern anyone cheering at any university, even though it would be in their self-interest to do so. Similarly, our rapidly aging white middle class will find its retirement income generated by an increasingly nonwhite work force—a small cheer for increasing educational and occupational attainments by minorities would seem to be in order!

This report is in part a demonstration of the dependency of each educational level for the others. It is hoped that this discussion will be stimulating and beneficial to those who read this report and think about it.

ORGANIZATION:

This report is organized along four major dimensions:

1. Briefing on major demographic trends
2. Retention to high school graduation
3. The transition from school to college
4. Completion of college programs

These seem to be four major characteristics of the educational continuum, in that changes in any one will create changes in the other three. There is literature dealing with each of our four individual dimensions, but there are few models for our attempt to put the four together.

BEST COPY AVAILABLE

Part One: Briefing on Major Demographic Trends

Before starting on the four themes, it may be useful to describe the demographic changes that form the framework of our analysis.

1. **BIRTHS**: one of the major tools of demography is differential fertility—some groups have a lot more children than others, and thus are over-represented in the next generations. For example, it is clear that Cubans (1.3 children per female) and whites (1.7 children per female) will be **LESS** numerous in our future—a group needs about 2.1 just to stay even, which is the case for Puerto Ricans. However, Blacks (2.4), and Mexican-Americans (2.9) will be a larger part of our population in the future. All these young people have to do is **GROW OLDER** and we have the future. In attempting to explain differences in birth rates by region, we need to keep in mind that these regional differences are mostly ethnic—increased birth rates in the "Sun Belt" are due to a large degree by minority births, while "Frost Belt" declines are caused by the white populations. See Exhibit 2 on page 4.

2. **AGE**: Mostly because of varying birth rates, the average age of groups in the U.S. is increasingly various—the 1980 Census reveals that the average white in America is 31 years old, the average Black 25, and the AVERAGE Hispanic only 22! It should be easy to see that age produces population momentum for minorities, as the typical Hispanic female is just moving into the peak childbearing years, while the average white female is moving out of them. This is why California now has a "majority of minorities" in its elementary schools, while Texas schools are 46% minority, and half the states have public school populations that are more than 25% nonwhite, while all of our 25 largest city school systems have "minority majorities."

By the year 2020, most of the Baby Boom will be retired, its retirement income provided by the much smaller age groups that follow it. This is a demographic argument, not an economic one. But if larger numbers are taking out, and much smaller numbers are putting in, the economics are rather clear. For example, in 1950 seventeen workers paid the benefits of each retiree. By 1992, only three workers will provide the funds for each retiree and one of the three workers will be minority.

It is also clear that for the next decade, the only growth area in education will be in adult and continuing education, with increases in elementary schools in certain regions. Perhaps more important is that in 1983 there were more people over 65 in America than there were teen-agers, and (because of the Baby Boom growing old) that condition remains a constant for as long as any of us live. America will simply not be a nation of youth in our lifetime. This is why by 1992, half of all college students will be over 25 and 20% will be over 35.

The mostly white Baby Boom, on the other hand, represents 70 million people who are middle-aged during the 1980's. During the 80's, age groups will exhibit the following changes:

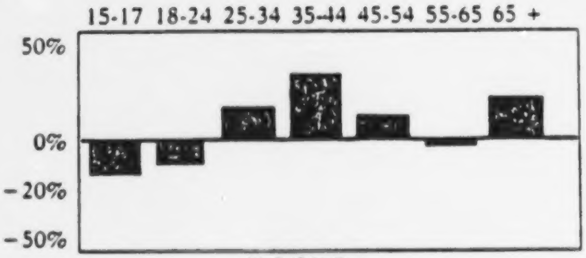


Exhibit 3
Age Group Changes During
The 1980's

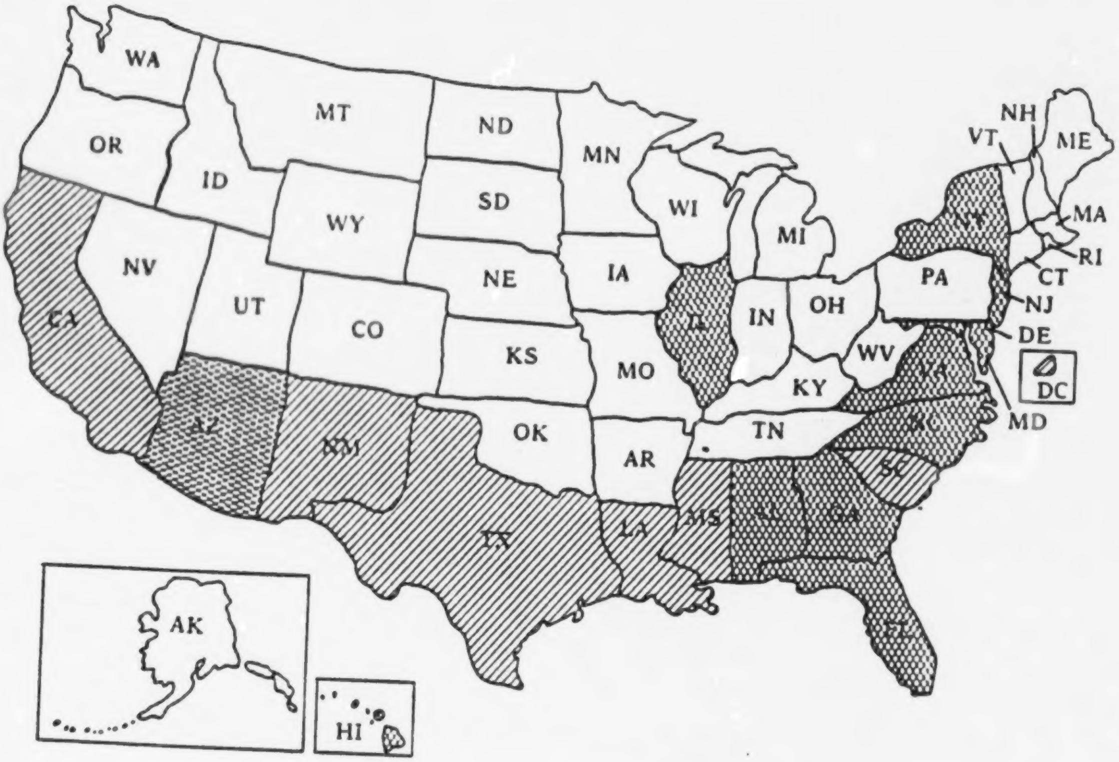
3. **FAMILY STATUS**: Major changes have taken place in the ways we live together. In 1955, 60% of the households in the U.S. consisted of a working father, a housewife mother and two or more school age children. In 1980, that family unit was only 11% of [illegible] homes, and in 1985 it is 7%, an astonishing change.

More than 50% of women are in the work force, and that percentage will undoubtedly increase. Of our 80 million households, almost 20 million consist of people living alone. The Census tells us that 59% of the children born in 1983 will live with only one parent before reaching age 18—this now becomes the NORMAL childhood experience. Of every 100 children born today:

- 12 will be born out of wedlock
- 40 will be born to parents who divorce before the child is 18
- 5 will be born to parents who separate
- 2 will be born to parents of whom one will die before the child reaches 18
- 41 will reach age 18 "normally"

The U.S. is confronted today with an epidemic increase in the number of children born outside of marriage—and 50% of such children are born to teenage mothers. Although the percentage of Black teenage girls who have children outside of marriage is higher than that of white girls, comparisons with other nations indicate that a white teen-age female is twice as likely to give birth outside of marriage as in any other nation studied. The situation is most striking with very young mothers, age 13 and 14. Indeed, every day in America, 40 teen-age girls give birth to their THIRD child. To be the third child of a child is to be very much "at risk" in terms of one's future. It appears that sexual activity among the young is no more frequent here than elsewhere; the major difference is the inability of American youth to get access to informa-

Exhibit 2
Minority Enrollment as Percent of Public Elementary/Secondary School Enrollment, by State


WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
IL
MI
IN
OH
KY
TN
MS
AL
GA
FL
SC
NC
VA
WV
PA
NY
VT
NH
ME
MA
RI
CT
NJ
DE
MD
DC
AK
HI

☐ Less than 10.0 percent
☐ 10.0 to 24.9 percent
▩ 25.0 to 34.9 percent
▨ 35.0 percent or more

Percent minority enrollment in public elementary secondary schools was generally greatest in the Southern and Southwestern States and in California. The percent black enrollment was highest in the Southern States while the percent Hispanic enrollment was highest in New Mexico, Texas, California, and Arizona.

(The Condition of Education, 1984 edition. A Statistical Report by the National Center for Education Statistics.)

tion about contraception. Information about abortion is similarly restricted, although the variations across states are wide—Mississippi reports 4 abortions per 1,000 teen-age live births, while New York reports 1,200 abortions compared to 1,000 teen-age live births.

There is a particular aspect of this situation that is vital—teen-age mothers tend to give birth to children who are premature, due mostly to a lack of physical examinations and to their very poor diet while pregnant. Prematurity leads to low birth weight, which increases these infants' chances of major health problems due to the lack of development of the child's immune system. Low birth weight is a good predictor of major learning difficulties when the child gets to school. This means that about 700,000 babies of the annual cohort of around 3.3 million births are almost assured of being either educationally retarded or "difficult to teach." This group is entering the educational continuum in rapidly increasing numbers.

Indeed, every day in America, 40 teen-age girls give birth to their THIRD child.

Several other family factors are important to cite—first, with over half of the females in the work force (and almost 70% if you only consider "working age" women), the number of "latch-key children"—those who are home alone after school when adults are not present—has shown a major increase and will continue to do so, as women increasingly opt for work AND children. (Of those mothers of one-year-olds, half have already returned to work.) The typical pattern for women today is (1) get settled in a job, (2) get married, and (3) have children, as opposed to the previous pattern of entering the work force only after the children were mature enough to fend for themselves. There are at least four million "latch-key" children in the U.S. of school age. Many of them think of home as a dangerous, frightening place, particularly if there are no other children in the home. They "check in" with parents by phone. They spend many hours watching TV and talking to their friends on the phone, and have to make decisions about knocks on the door and phone calls from strangers. The evidence is not yet in, and some children may benefit from having family responsibilities while home alone, but many others become problems at school.

There is some very good news also—there is today a solid and relatively well-established Black middle class family structure in the U.S. Access to the political structure has yielded 247 Black mayors in the U.S., and 5,606 Black elected officials in 1984, along with 3,128 elected Hispanic officials. Forty-four percent of the entering freshman class at the University of California, Berkeley in fall, 1984 was minority, while Harvard's entering class was 20% minority. In some major American cities, Blacks have been able to move to the suburbs. Here are the ten highest rates:

	Blacks in Metro Area	**Blacks in Core City**	**Blacks in Suburbs**	
Miami	281,000	87,000	194,000	(69%)
Newark	406,000	191,000	215,000	(52.9%)
D.C.	870,000	448,000	422,000	(48.5%)
L.A.	943,000	504,000	439,000	(46.5%)
Atlanta	525,000	283,000	242,000	(46%)
Oakland	263,000	159,000	104,000	(39.5%)
St. Louis	319,000	206,000	113,000	(35.4%)
Birmingham	240,000	158,000	82,000	(34.1%)
Philadelphia	883,000	638,000	245,000	(27.7%)
Cleveland	345,000	251,000	94,000	(27.2%)

This is not to say that suburban housing is not segregated, but simply that there is more choice available in the system today. One unfortunate thing is that the percentage of Black two-income families is declining as a percent of all Black households, meaning that Blacks now distribute themselves over a much wider socioeconomic range than in the past. (Politicians seeking "The Black Vote" will have to be very careful in the future, as will politicians courting any supposedly "special interest group.") Between 1970 and 1980, the percentage of women, as well as minorities, in professional and managerial jobs virtually doubled. See Exhibit 4.

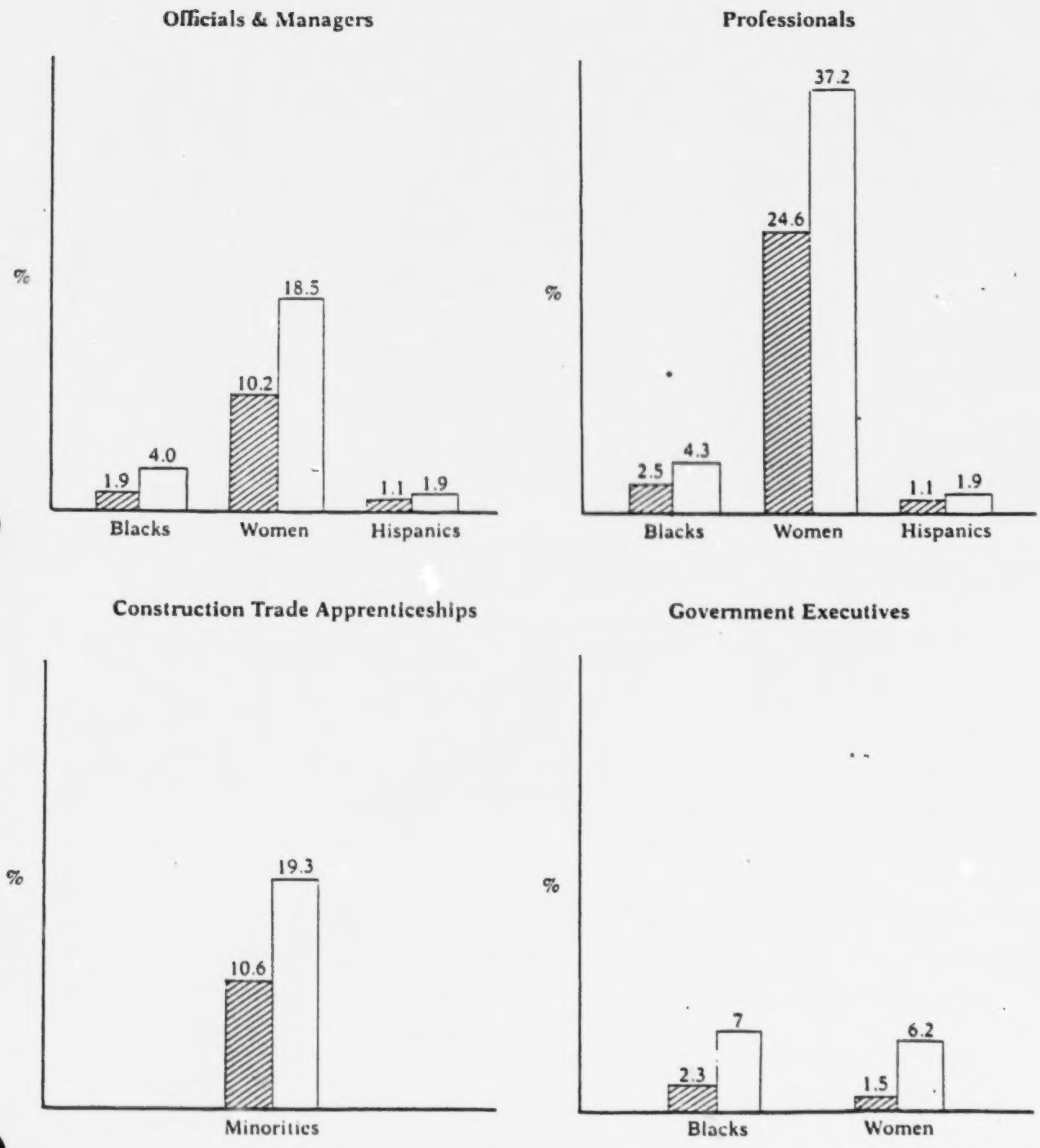
There can be little doubt that affirmative action programs were responsible for at least some of these gains—firms doing business with the Federal government increased their minority work force by a fifth, while firms not doing business with the government increased minorities by only an eighth.

The other side of this coin is the rapid increase in the number of poor households headed by a female Black or Hispanic. Ninety percent of the increase in children born into poverty is from these households. Although two of three poor children are white, the percentage of Black children living with one parent who are poor is much higher, and those children who stay in poverty for more than four years (only one in three poor children does) are heavily Black. A child under six today is six times more likely to be poor than a person over 65. This is because we have increased support for the elderly, and government spending for poor children has actually DECLINED during the past decade. The result is an increase of over two million children during the decade who are "at risk" from birth. Almost half of the poor in the U.S. are children.

Today, we are a nation of 14.6 million Hispanics and 26.5 million Blacks. But by 2020 we will be a nation of 44 million Blacks and 47 million Hispanics—even more if Hispanic immigration rates increase. The total U.S. population for 2020 will be about 265 million people, a very small increase from our current 238 million—and more than 91 million of that figure will be minorities (and mostly young, while the mostly white Baby Boom moves out of the childrearing years

1970 – ▨
1980 – ☐

Exhibit 4



Officials & Managers

Professionals

Construction Trade Apprenticeships

Government Executives

by 1990, creating a "Baby Bust" that will again be mostly white, while minority births continue to increase).

We need to say a word about the third growing non-white sector of our nation, Asian-Americans. At the moment they are a much smaller group than Blacks and Hispanics (about 3.7 million in 1980), but their growth potential from immigration is very great for the next decade—they currently represent 44% of all immigrants admitted to the US. However, their diversity is very great:

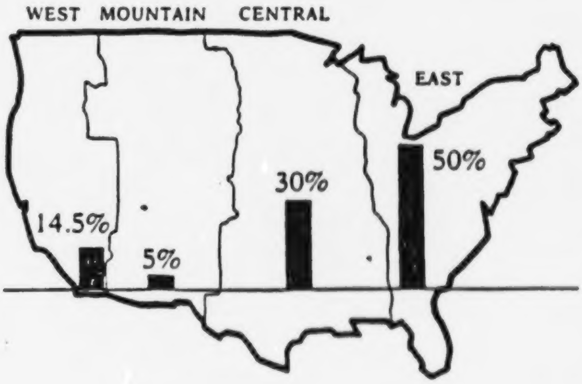
- Sixty percent of Asian-Americans are foreign-born, yet the average Japanese-American speaks English as his/her native language, while almost no Indochinese do.
- Almost 30% of Asian-Americans arrive in the U.S. with four years of college already completed—39% of all Asian-American adults are college graduates.
- Their SAT verbal scores are far below white averages; their math SAT scores are equally far above whites.
- Because of increased Indochinese immigration, language problems among Asian-American youth will increase.
- Asian-American youth are heavily enrolled in public schools; a high percentage graduate and attend college. (Although access to college is widespread, hiring and promotion discrimination against Asian-Americans is also common.)
- Because of their competence in math and the physical sciences, Asian-Americans represent a disproportionate share of minority students at many of the highest rated universities.

Most important, by around the year 2000, America will be a nation in which one of every THREE of us will be non-white. And minorities will cover a broader socioeconomic range than ever before, making simplistic treatment of their needs even less useful.

As we review this material, it is easy to be comforted by the data on increased access for minorities to good jobs, to political leadership, and to owning their own businesses. However, it is equally clear that what is coming toward the educational system is a group of children who will be poorer, more ethnically and linguistically diverse, and who will have more handicaps that will affect their learning. Most important, by around the year 2000, America will be a nation in which one of every THREE of us will be non-white. And minorities will cover a broader socioeconomic range than ever before, making simplistic treatment of their needs even less useful.

4. REGION: Although the "Sunbelt" has shown high increases in growth percentage, the U.S. is very much an Eastern-dominated nation and will remain so well past the year 2000. An easy way to see this is to look at the percentage of our 237 million population who reside in each of the four time zones:

Exhibit 5
Of 237 Million Population, Percentage that Resides in Each Time Zone



In 1985, we can see that the declines in the Middle Atlantic and New England states that were characteristic of the 70's have now been slowed—outmigration from most of these states has been matched by inmigration, leaving us with a new question: how do the people moving out compare with the people moving in? For example, Colorado is now the state with the highest percentage of its population possessing a college degree, but a very large number of these degrees were acquired in another state, at that state's expense, while Colorado has enjoyed the talents of the college graduates moving in.

In addition, the national decline of about 13% in public school students of the 1970-1980 decade breaks down to zero decline in about 12 "Sunbelt" states and over 25% in some "Frostbelt" states. There will be two major education agendas in the next decade: (1) planning for growth (kindergarten through graduate school) in 12 states, and (2) planning for continuing declines in secondary school populations in most of the rest. But few states with growth projections have noticed that the increased youth cohort is an increased MINORITY pool—"minority majorities" are possible in the next decade in the public schools of ten states.

In addition, the Bureau of Labor Statistics has stated that of the current group of college students, one in five will graduate and work in a job that requires no college education at all.

5. EDUCATION: The higher education system is facing some major problems in terms of the work which will be done by its graduates. For example, over 18,000 doctorates will be awarded in the humanities during the 1980's with only a "handful" of jobs available for them in teaching. Doctoral scientists and engineers are more employable, and their numbers have grown since 1973 by 52%, to 364,000. However, only one in eight is female, and they are mainly in biology (20%), sociology/anthropology (27%), and psychology (28%). Few minorities are represented: Blacks are only 1.3% of doctoral scientists, Hispanics 0.6%, while Asians were 7.7% although they are only 1.5% of the U.S. population. (And in all U.S. graduate engineering programs, 43% of the students are foreign students. Thirty-six percent of all math and computer science graduate students are foreign students.)

In addition, the Bureau of Labor Statistics has stated that of the current group of college students, one in five will graduate and work in a job that requires no college education at all. In 1972, one in seven workers had a college degree, while in 1982 one worker in four did. Our economy is very good at generating new jobs—but most of them are low-paying service jobs which require little education. The problem is not a decline in "quality" jobs, but rather an increase in the number of college graduates, from 575,000 per year entering the work force annually during the 1960's to 1.4 million college graduates going to work annually during the 1970's. The problem may be alleviated in the next decade due to the decline of about 5 million youth in the 18-24 year old cohort, which may bring educational supply and job demand into better balance.

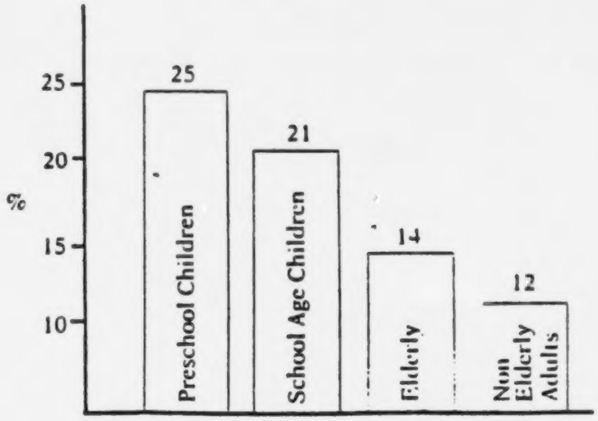
Our public schools have about finished a major season of state-based educational reforms. As of February, 1985:

- 43 states have strengthened high school graduation requirements, including 15 that require "exit tests" of high school seniors
- 14 states have adopted some version of "merit pay"
- 37 will lure the best college students into teaching through scholarships and other incentives
- Although standards have been made "tougher," only a handful of states have appropriated additional moneys for counselling and remediation for those who will need assistance in reaching the standards.

With the increased percentage of women (especially mothers) in the work force, the issues surrounding day care and early childhood education are coming to the fore. The successes of Head Start and similar programs have focussed new energy on the potential of early intervention programs for solving some of the educational and social problems that crop up later.

The number of youth eligible for Head Start type programs will increase in the next decade, as the number of children in poverty continues to expand. Poverty is more common among children than any other age group. In 1983, the poverty rate was:

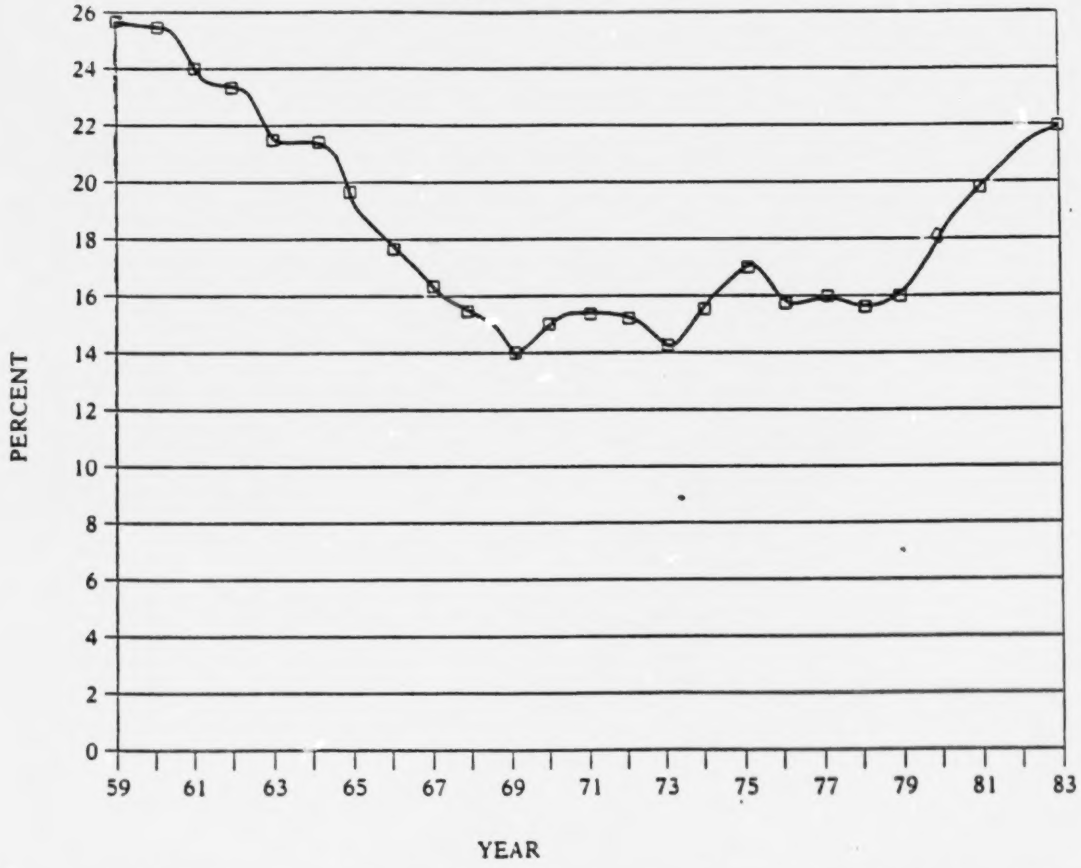
Exhibit 6
Poverty Rate 1983



In 1983, 14 million children lived in poverty—about 40% of the poor population. We have already seen that children in poverty come from certain kinds of households. In 1983, childhood poverty was 40% among ethnic minorities, but 14% among non-minority children. Fifty percent of children in female-headed households were in poverty compared to 12% in male-present households. Thirty percent of children in central cities were in poverty in 1983, but only 13% of children in non-central portions of cities. From 1959 to 1969, childhood poverty fell sharply, declining by about 6.5 million, despite an increase of 9% in the child population during the decade. From 1969 to 1979, childhood poverty increased, but slightly and erratically. From 1979 to 1983, however, the number of children in poverty grew by 3.7 million, and the rate grew from 16 to 22 percent, the highest level in 21 years. Although there was no decline in childhood poverty in 1983, such rates are quite dependent on economic conditions; if the present recovery continues it may be that childhood poverty will be reduced. The only thing we know with certainty is that the number of children eligible for Head Start type programs has increased by at least 1/3rd, while the programs are being level-funded in 1985.

BEST COPY AVAILABLE

Exhibit 7
Poverty Rate Among Children,
Ages 0–17



NOTE: Rates slightly underestimated because of exclusion of older unrelated children and, since 1979, unrelated subfamilies. Rates before 1966 adjusted downward for consistency with later years. (Poverty Among Children, Congressional Budget Office, December 3, 1984).

Given the fact that only around 400,000 children are actually in Head Start, while at least three million are eligible, one of the best state strategies for improving their future would be the establishment of a state-wide Head Start system. Phasing in such a system might take a number of years, but no innovation could assure greater cost savings in terms of future services (prisons, drug control centers) that would not be needed. Head Start programs work.

To summarize the education consequences of demographic changes:

1. More children entering school from poverty households.
2. More children entering school from single-parent households.
3. More children from minority backgrounds.
4. A smaller percentage of children who have had Head Start and similar programs, even though more are eligible.
5. A larger number of children who were premature babies, leading to more learning difficulties in school.
6. More children whose parents were not married, now 12 of every 100 births.
7. More "latch-key" children and children from "blended" families as a result of remarriage of one original parent.
8. More children from teen-age mothers.
9. Fewer white, middle-class, suburban children, with day care (once the province of the poor) becoming a middle class norm as well, as more women enter the work force.
10. A continuing decline in the level of retention to high school graduation in virtually all states,, except for minorities.
11. A continued drop in the number of minority high school graduates who apply for college.
12. A continued drop in the number of high school graduates, concentrated most heavily in the Northeast.
13. A continuing increase in the number of Black middle class students in the entire system.
14. Increased numbers of Asian-American students, but with more from Indonesia, and with increasing language difficulties.
15. Continuing high drop-outs among Hispanics, currently about 40% of whom complete high school.
16. A decline in the number of college graduates who pursue graduate studies in arts and sciences.
17. A major increase in part-time college students, and a decline of about 1 million in full time students. (Of our 12 million students, only about 2 million are full time, in residence, and 18-22 years of age.)
18. A major increase in college students who need BOTH financial and academic assistance. A great liaison between the offices of student financial aid and counseling will be essential.
19. A continuing increase in the number of college graduates who will get a job which requires no college degree. (Currently 20% of all college graduates.)
20. Continued increases in graduate enrollments in business, increased undergraduate enrollments in arts and sciences COURSES but not majors.
21. Increasing numbers of talented minority youth choosing the military as their educational route, both due to cost and direct access to "high technology."
22. Major increases in adult and continuing education outside of college and university settings—by business, by government, by other non-profits such as United Way, and by for-profit "franchise" groups such as Bell and Howell Schools and The Learning Annex.
23. Increased percentage of workers with a college degree. (From one in seven to one in four today.)

Part Two: Retention to High School Graduation

The first and perhaps most important point to be made in this discussion is to point out the direct link between state level economic development and high school retention. In a state that retains a high percentage of its youth to high school graduation, almost every young person becomes a "net gain" to the state—with a high school diploma, there is a high probability of that person getting a job and repaying the state for the cost of his/her education, through taxable income, many times over. However, in a state with a poor record of retention to high school graduation, many youth are a "net loss" to the state, in that without a high school diploma, the chances of that student getting work, and thus repaying the state for that person's education, are very small indeed. Additionally, that young person is unlikely to leave the state, becoming a permanent economic burden to that state's economy.

The following table presents the top and bottom states in retention to high school graduation, along with two variables that do NOT predict retention levels:

	Retention		Teacher Salary	Per Pupil Expend.
Minnesota	# 1	(86.0%)	22nd	16th
North Dakota	2	(84.9%)	40th	40th
Iowa	3	(84.8%)	27th	24th
South Dakota	4	(82.8%)	47th	37th
Wisconsin	5	(82.3%)	8th	12th
Nebraska	6	(81.3%)	41st	21st
Montana	7	(80.9%)	28th	13th
Kansas	8	(80.5%)	36th	29th
Utah	9	(80.2%)	25th	45th
Wyoming	10	(80.0%)	6th	15th
	* * *			
California	41	(68.0%)	10th	22nd
Kentucky	42	(67.3%)	31st	46th
Alabama	43	(67.1%)	35th	46th
North Carolina	44	(67.1%)	29th	36th
Tennessee	45	(66.7%)	45th	48th
New York	46	(65.9%)	7th	2nd
Georgia	47	(64.3%)	33rd	49th
Florida	48	(63.7%)	32nd	27th
Louisiana	49	(63.4%)	39th	40th
Mississippi	50	(61.8%)	50th	50th

Certain things are obvious from these tables. A large majority of the high-retention states are located in the Midwest, a majority of the low retention ones are in the Southeast. Ethnic diversity is greater in the low retention states, which are also more urban. It also should be clear that neither teacher salary nor per pupil expenditure is a good indicator of a state's retention ability, while pupil-teacher ratio turns out to have a much better predictive level than either of the others. (The range for pupil-teacher ratio varies from 15.0 to 1 in Wyoming to 23.1 to 1 in California, while even greater variation can be obtained in big cities compared to suburbs, and elementary schools compared to high schools.) Why is teacher/student ratio related to retention when teacher salary and per pupil expenditure are not? The question needs further analysis.

We are more aware than ever that if large numbers of youth fail in school and work, the consequences for us all are severe.

In context, the retention data take on a different aspect. We have made great strides since the turn of the Century in increasing the educational level of our citizens—in 1900, only about 10% of the youth cohort graduated from high school. By 1950, 25% of Black youth and 56% of white were graduating, while in 1978, 75% of Black youth were graduating and 85% of whites. (Historical data on Hispanic youth is hard to come by, but it appears that today about 60% graduate from high school.) As a result of this major increase in "productivity," higher education benefitted doubly in the 1970's—once from the increased numbers of the Baby Boom, once again from the higher "yield" of high school graduates. In 1947, only about 28% of youth attended college, while today, more than 50% will attend some form of postsecondary education. In our entire population, the percentage with high school diplomas has risen from around 13% in 1910 to 24% in 1940, and 70% in 1981. Today, one in four workers has a college degree. This more highly educated adult population (and work force) has added greatly to the economic progress of our nation. We are more aware than ever that if large numbers of youth fail in school and work, the consequences for us all are severe.

High school drop-outs have a rather typical profile. They are usually from low-income or poverty settings, often from a minority group background (although not often Asian-American), have very low basic academic skills, especially reading and math, have parents who are not high school graduates and who are generally uninterested in the child's progress in school, and do not provide a support system for academic progress. English is often not the major language spoken in the home, and many are children of single parents. Drop-outs are heavier among males than females—males tend to leave school to get a job (which usually turns out to be a failure), while females tend to drop out in order to have a child. Drop-outs are generally bored in school, they perceive themselves accurately as failures in the school culture, and are usually very alienated from school.

Our survey of states[1] revealed that as of 1984, virtually no state passed "reform" legislation that contained specific plans to provide remediation to those who did not meet the higher standards on the first try—thus, almost all states were willing to have a higher drop-out rate from secondary schools in their state, even though the economic (leaving out the social) costs of this position will be very high indeed. Early in 1985, several states began to be responsive to this position, although a majority of the "reform" states have, in essence, moved up the high jump bar from four to six feet without giving any additional coaching to the youth who were not clearing the bar when it was set at four feet. This is bad coaching, and worse educational policy. Benjamin Bloom, noted psychologist, has been very convincing in showing that among the truly excellent performers in a wide range of fields from sports to music, natural talent is less of a factor than hard work and persistence. If we have standards we wish EVERY student to attain, some will require more assistance than others. The ideal is to have all students meeting the higher standards. Most states have not behaved as if they shared this ideal.

---

[1] "State Use of Demographic Data for Educational Planning." Available from IEL for $2.

Eliminating low performers from the public schools was seen as a way of displacing the problem, not solving it. Out of school, these students present more of a social and economic problem than they do IN school.

Many localities, however, have developed excellent drop-out prevention programs. Particularly useful are the programs which combine intensive, individualized training in the basic skills with work-related projects. Vocational education and work-study strategies seem to work well, as does the "alternative high school" pattern. When the relation between education and work becomes clear, most of these potential drop-outs can be motivated to stay in school and perform at a higher level. (These work-related strategies are more likely to be successful with male students.)

The state survey that was a part of our project indicated a widespread sense that much more needs to be done in this area. Most frequently mentioned were programs that stress the basic skills, stimulating a more personal and caring attitude on the part of all staff in dealing with potential drop-outs, and identifying and intervening earlier in the education of potential drop-outs. More and more sophisticated counselling was mentioned often, as was a variety of efforts to coordinate the work of family, school and social welfare agencies in keeping potential drop-outs in school, and increasing their educational success.

We also discovered a widespread concern that the current spate of state-based "reform" legislation will only increase the group of push-outs to be added to the drop-outs. Eliminating low performers from the public schools was seen as a way of displacing the problem, not solving it. Out of school, these students present more of a social and economic problem than they do IN school. If there were other institutions that formed a "safety net" to catch the drop-outs from schools, one might feel differently about it. (The GED, for example, may be a useful device for some students who seize the initiative, but not all.) But no such safety net exists, at least for educational purposes.

There are times when the "definitive negative" assessment—this program NEVER works—could be more useful than the "ambiguous positive"—it might work but you can't tell.

Given the basically local nature of such drop-out prevention programs, there exists a major need to coordinate and share information on what works and why. If each of the 14,000 school districts has to begin their drop-out prevention program from scratch, much inventing of wheels will be done. Some characteristics of successful programs are not difficult to ascertain—small settings with low student-teacher ratios, personalized attention to student needs, materials and teaching formats that stress the immediate and practical, stress on the basic academic skills, and consistent patterns of rewarding student achievement. The hallmark of the "continuation school" seems always useful—a way of keeping in touch with the student after graduation, and particularly allowing the school to serve the needs of older students who have left school but wish to return for a diploma or GED. Different subcultures and regions will have to tailor these general notions to their area, but a large percentage of what works in one place will work in another. And in addition, if a program fails completely in one location, it is likely to do the same in others. (There are times when the "definitive negative" assessment—this program NEVER works—could be more useful than the "ambiguous positive"—it might work but you can't tell. The ideal recommendation might be "You could try A to F and see what works best for you, but don't try G—it NEVER works." Negative knowledge is very important in making a profession out of a field.)

One of the widely held views among educators interviewed in this project is that we intervene too late in the course of a student's development, that certain parts of the profile of a drop-out prone student may be visible as early as the third grade. To allow these sores to fester until the eleventh grade is to virtually guarantee that the student will drop out. Many of the newer day care approaches integrate meaningful learning even at pre-school levels, largely to increase the child's self-confidence as a learner and to begin preparation for basic skills teaching when the child enters school. Key to all of these early intervention programs is some form of home support. Not only is this important when there are cultural differences the school must negoti-

BEST COPY AVAILABLE

ate, but particularly with children who do not speak English, and in whose homes English is not spoken. This crucial problem seems to be easing somewhat with Mexican-Americans, as most of the "Spanish only" speakers are older adults, and an increasing number of youth report familiarity with English as well as Spanish. The problem intensifies, however, for Indochinese immigrants and their children, who often come to school having no familiarity with English.

Such programs are not inexpensive. But compared to the cost of neglect, (it costs about $25,000 to have a prisoner spend a year in a state penitentiary, about one-third of the cost of having a student at a state college), dealing with potential high school drop-outs early may turn out to be one of the biggest bargains available. It is important to observe that our position is not incompatible with high standards of student performance, we simply feel that every student should have the maximum opportunity to achieve these high standards.

What should we expect in terms of performance of schools in producing high school graduates? Certainly, each decade has yielded better returns than the previous decade, in terms of retention to high school graduation, while declines in academic achievement remain quite scattered by age, region, and ethnicity. There is no reason to say that other states could not do as well on retention as Minnesota, whose per pupil spending is no greater than many other states. If about 14% of white students are dropping out, and 24% of Black students, is there any reason to believe that the rates for Black students could not be moved to those for whites? And if 40% of Hispanics do not finish high school, is there any reason to believe that this number could not be cut to the 24 % Black rate, or to the 14% white rate? Females of whatever ethnic background drop out less than males—is there any reason to think that male rates could not be made to match those of females? The answer to all these question is NO—yet there are some clear indications that the decade of the 1980's will show a decline in retention for virtually every group discussed. Since 1980, the national figure for all students has declined from 76% high school graduation to 73%. The unintended fall-out from the spate of "excellence" state reforms will undoubtedly cut the number even further.

Few factors are emerging on the equity side, except for a number of locally developed and often very creative and productive programs to improve retention in public schools. These programs need to be put together into a coherent framework, both at the state and larger levels. The higher education community, instead of seeing this issue as a spectator sport, needs to get involved in trying to improve retention—after all, this will be their bread and butter very shortly. Organizations like the Education Commission of the States need to begin to encourage states to follow their reform legislation with implementing legislation to make sure that every youngster has a reasonable opportunity to achieve these new standards. To do so would be in everyone's best interests, both short and long term. As with a food chain, changes at one level in the educational continuum will have direct and predictable consequences for other levels in the "chain." Higher educational leaders have not been used to scanning the environment before them, particularly the educational environment. During the coming decade, this kind of information will be a necessity for any strategic planning in higher education. Similarly, public school leaders will have to be more acute in looking carefully at who is moving into and out of their district, and who is being born.

Since 1980, the national figure for all students has declined from 76% high school graduation to 73%. The unintended fall-out from the spate of "excellence" state reforms will undoubtedly cut the number even further.

Part Three: Access to College

The first point to be made is that enrollments in higher education have benefitted greatly from two factors—first, the 70 million Baby Boomers who have swollen college admissions for two decades; and second, a major increase in the percentage of youth who have graduated from high school and are thus in a position to attend college—from less than 50% in 1946 to 73% today. (But as the slope of the youth decline increases in most states in the years to come, and retention rates to high school graduation continue to drop, higher education will have to get used to getting a smaller percentage of a declining total.)

The range and diversity of higher education in the U.S. is a source of constant amazement—entering freshman at some institutions know more than graduating seniors from others.

For those who do graduate from high school (plus the increasing but somewhat invisible thousands who acquire the GED), there is SOME college or university that will probably accept them. The range and diversity of higher education in the U.S. is a source of constant amazement—entering freshmen at some institutions know more than graduating seniors from others. The B.A. is certainly not a learning "floor" that guarantees a minimum level of competence which all degree holders can exhibit. As long as each institution attracts the right student mix for its particular mission and level, the system seems to work quite well. Indeed, it thrives on diversity, which is fortunate given the diversity inherent in the U.S. population. Community colleges, for example, have a disproportionate enrollment of Black and Hispanic students, while on the other hand, the 1984 entering freshman class at the University of California, Berkeley was only 56% white! (The Berkeley situation is partially explained by its excellence in math and the physical sciences, and thus their minorities are heavily Asian-American.) UCLA also has become heavily non-white, without lowering its admissions standards at all. In fact, this fall's entering class at Harvard was 20% minority, and was selected from the top sixth of the applicant pool, whereas a decade ago Harvard was only 10% minority, and the students were selected from the top third. While doubling their selectivity, Harvard has doubled the number of minority students at the same time.

But when we leave the community colleges and the "blue chip" institutions, there is a large group of institutions, public and private, that have not increased their minority populations over the last decade. Given the decline in white graduates of secondary schools that faces us until at least 1994, these institutions will have to face up to some difficult decisions. However, comparatively few of these institutions will close, compared with the past—since 1900, we have closed about 200 institutions of higher education every two decades. However, we have founded almost as many new ones as closures, so that the institutional "net" remained fairly constant through the years. The makeup of institutions did go through a restructuring during the sixties and early seventies when we were opening a new community college every WEEK. In the next decade or two, closure rates will probably not be balanced out with starting rates—we will have more "deaths" than "births." Because of the great political difficulty in closing a public institution of higher education, a large number will continue to exist simply because they will not be allowed to die—the legislature will serve as their heart-lung machine. A very large number of state colleges, designed to serve the needs of a sector of a state, are simply not located near any population centers, yet for them, the issue will not be survival but significance. The most difficult problems will be institutions that got the "greatness" disease in the 1960's, added many unneeded graduate programs, and assumed that student enrollments would increase forever.

It is likely that as the number of high school graduates declines more steeply from now to 1994, and fewer students are spread across the same number of institutions, the commendable specificity of college catalogues and brochures may be lost, as some institutions try to attract anyone who is warm and breathing to their opening class.

The declines will be heavily suburban, 18-24 years old, full time, as well as white and middle class. Private colleges and universities, now enrolling about 22% of all students, will be the most "at risk," not only because they run a larger share of their budget from tuition revenues, but because "caps" on student financial aid will make the choice of a private college an impossible one for many middle class parents. However, the Congress at this writing has not been totally clear on cuts in student assistance.

It is our view that the access issue needs to be defined carefully—one criterion would be access to SOME institution of higher education; a second would be access to the BEST institution for that particular student. On the first criterion (thanks especially to community colleges) access has become virtually universal for any high school graduate, anywhere in the country, regardless of race, sex, age or class. On the second criterion, we undoubtedly have a long way to go, although access to the best institution can be improved by better institutional publicity at the college level so that the student knows what the institution expects, plus better guidance from secondary schools and employers, so that the student's aspirations are realistic and clear.

The question behind the question: why isn't higher education more appealing to America's minority high school graduates?

It is likely that as the number of high school graduates declines more steeply from now to 1994, and fewer students are spread across the same number of institutions, the commendable specificity of college catalogues and brochures may be lost, as some institutions try to attract anyone who is warm and breathing to their opening class.

At the same time, the very small number of "highly selective" institutions will probably be as selective as ever, perhaps even more so, and their pool of applicants is likely to be even more diverse by ethnicity, sex and class than before. For example, it may be quite normal today for the bright son of a Black college graduate to think of applying to Yale—good news for Yale, not such good news for the Black colleges, in that many of their best potential recruits are eagerly sought after by a number of other institutions.

Access discussions usually center on whether or not institutions of higher education are willing to admit high school graduates regardless of sex, ethnicity or class. By and large, access to SOME college or university is possible today for every high school graduate. But today, one out of eight "highly able" high school graduates chooses not to attend college. Twenty-nine percent more Blacks graduated from high school in 1982 than in 1975, but Black enrollment in college dropped 11% during the period. High school graduation rates for Hispanics increased 38% during the 1975 to 1982 period, while Hispanic college enrollment declined 16%.

The question behind the question: why isn't higher education more appealing to America's minority high school graduates? Access is a relatively meaningless idea if people are not interested in the thing to which access is allowed. We know little about why a larger number of minority high school graduates is producing a smaller number of college students. Declines in financial aid, lack of relationship between a college degree and a good job, inadequate high school counselling programs for minorities, are all mentioned as possible contributors. Many minority youth are fully aware that a college degree no longer guarantees access to a high level job. It may even be that many minority high school graduates will get a job for a few years after high school graduation, then enter some postsecondary program at a later date. It is certain that many talented minority youth are finding military service to be a very appealing way to gain further education, particularly in "high tech."

At the moment, most of this is hypothetical, but certainly some doubt can be cast on the notion that higher education is an essential part of the American Dream for an increasing number of bright and accomplished students of whatever ethnic background. This is certainly the kind of issue that should begin to draw together the various faculty, administrative and board leadership from schools and colleges to see what can be done to improve access, retention and performance at all educational levels. With a decline of about 5 million in the youth cohort, it would be in everyone's best interest to make the school-college transition easy and productive for the largest number of qualified students.

Lifelong learning is here today for about half of the American adult population—ready or not.

On the other hand, diversity is the American hallmark, and recent successes of the military and business worlds in their educational endeavors suggests a very different postsecondary world. Most institutions with which we are involved, from hospitals and local governments to museums and the workplace, today have an educational arm. Lifelong learning is here today for about half of the American adult population—ready or not. Colleges and universities are a part of this picture, but only a part (12 million of about 40 million people being educated past high school). Given the demography plus the disaggregation of the providers of educational services, the portion of the total pie for colleges and universities will continue to decline—they will have a relatively constant place in a rapidly expanding universe. At the moment, ten million workers are taking eighteen million courses a year, most of them offered "in-house" by the company's own education staff. This is a minimum figure.

The Baby Boom is now in the peak middle years of earning and learning. Adult education is the only growth component possible in postsecondary education. This universe will continue to expand until the Baby Boom begins to retire in 2000, but higher education will only develop a limited share of this area, which is appropriate in an increasingly diverse world of education producers and consumers.

BEST COPY AVAILABLE

Part Four: Retention to College Graduation

Studies done over the last twenty years affirm a central truth: of 100 students admitted to a four-year bachelors program, less than 50 (about 46) would graduate, on time, from the institution they entered. If one extends the time to seven years, about 70 of our original 100 would have graduated from SOME institution by that time. It seems important to point out that the "template" for undergraduate education (eight semesters of instruction straight through to graduation) has not been the path taken by even a simple majority of students over the years. Our response has tended to be criticizing part-time and older students with family and job responsibilities rather than revising the template so that the length of a student's education is variable. Often we show a fierce dedication to the TIME of an education while appearing confused about its CONTENT or OUTCOMES. But less than half of the undergraduate students seem to agree with the "straight through" principle.

We also know that unlike the high school drop-out, the college drop-out who is not a flunk-out tends to have as good a grade average as those who stay, often even better. Major reasons students give for dropping out of college are heavily financial, but this is sometimes the easist explanation for what may be a very complex issue. It would appear that many, if not most, drop-outs are in reality STOP-outs who simply have to do something else before resuming their studies. Yet they are often treated by the college or university as persons who have left higher education forever. At the moment, we have no effective and economical system to routinely track students who move from one campus to another, making the effectiveness of "retention" efforts difficult to assess if retention is taken to mean graduation from another institution than that in which the student originally enrolled. Some students SHOULD transfer, others SHOULD stop out for awhile, yet they are currently recorded as casualties.

Often we show a fierce dedication to the TIME of an education while appearing confused about its CONTENT or OUTCOMES.

The issue of retention to college graduation has focussed as an important one in the last several years, as institutions come to realize that even with a smaller freshman class, an improved retention rate can mean that the total student enrollment need not shrink, if a higher percentage of students stay for four years. (Indeed, one can raise some real questions about an institution with 1,000 freshmen, 500 sophomores, 200 juniors and 100 seniors, in the sense of community and solidarity, especially if the senior seminar of eight students is subsidized by the required freshman lecture course of 800.) Such systems seem designed to increase attrition, both due to the "sink-or-swim" attitude for freshmen and the over-indulged senior. One answer to this problem is to "front-load" the curriculum—provide more resources in the first year than the next three, in four-year programs, as recommended in the National Institute of Education report, "Involvement in Learning: Realizing the Potential of American Higher Education."[2]

... most potential drop-outs in academic difficulty are sending signals which no one can hear. This is because there is no standard faculty examination until the MIDDLE of the first term ...

The largest number of drop-outs occur in the freshman year—very early in the first term, most potential drop-outs in academic difficulty are sending signals which no one can hear. This is because there is no standard faculty examination until the MIDDLE of the first term, by which time behaviors which impede proper study are already firmly in place. Some institutions are now using "early warning systems"—several small tests or written work required in the first two weeks for entering students. In this way, students who are having trouble will be told while there is still time to modify their study and classroom behavior. Some institutions have increased their retention considerably after developing such programs. Many drop-outs and flunk-outs are bright enough to do good college work, but have never learned how to study effectively, nor how to take tests and do good written work.

Given the realities of student mobility, and the fact that less than half of them do the "correct" thing of graduating "on time," it might be useful to consider an alternative strategy—converting drop-outs to stop-outs. In the stop-out strategy, the student is not seen as a total failure, but rather as someone who has some additional tasks to complete before the college program is completed. The goal is the development of a set of decision rules which guide the student into readiness to return to some college at some future time. In a carefully drawn program of this sort, the institution benefits by the student who may return at a later date to complete the work, and also by the kind of word-of-mouth praise for the college that this program can develop. (Many community colleges do this kind of program very well.)

Surprisingly, many standard indicators do not predict dropping out. High school rank in class and GPA

[2] A Final Report of the Study Group on the Conditions of Excellence in American Higher Education. Sponsored by the NIE. Presented to the Secretary of Education and the Director of the National Institute of Education. October 1984.

only predict about half the cases, and those mainly in the first college year. SAT scores have a small ability to predict college grades, and no ability to predict drop-outs. Having clear educational and vocational goals helps the college GPA prediction but doesn't tell us who will drop out. There are several good ones: students with good study habits stay in college; those whose needs are compatible with what the campus environment encourages also tend to stay.

We are just entering an era in which youth will be in short supply in America.

Our earlier discussions would suggest that even more entry level students in the future will be in need of both financial and academic assistance. Although over 80% of institutions now report offering "remediation" courses and programs for entry level students, it is not clear what the level of financial and intellectual commitment to these programs is. In many cases, a teacher who works in the developmental area is not eligible for promotions and tenure, even though success in this role can be crucial to hundreds of students who can become successful college students with some support. Higher education may have to put additional human and dollar resources, as well as intellectual commitment, into this area in the future just to stay even on enrollments.

The task will be not to lower the standards but to increase the effort.

We are just entering an era in which youth will be in short supply in America. Fast food restaurants are one indicator of the future—virtually every one has a 'now hiring'sign in front. We are not fully used to having an excess of young people in America. If a new 19 year-old employee doesn't work out, fire him/her and get another, if a freshman doesn't work out, replace him/her with another, if the army recruit doesn't adapt, replace him/her, etc. For the next fifteen years at least, we will have to work harder with the limited number of young people we have to work with, whether we are in higher education, business or the military. If a young person fails the first time, we may have to help them succeed the second time rather than summarily replacing them. They will be scarce for a long time—as long as we live, there will be more people over 65 than teen-agers in America. How do we balance the interests of both?

The Bottom Line:

The rapid increase in minorities among the youth population is here to stay. We need to make a major commitment, as educators, to see that all our students in higher education have the opportunity to perform academically at a high level. There will be barriers of color, language, culture, attitude that will be greater than any we have faced before, as Spanish-speaking students are joined by those from Thailand and Vietnam. The task will be not to lower the standards but to increase the effort. To do so will be to the direct benefit of all Americans, as a new generation of people become a part of our fabric, adding the high level of energy and creativity that has always been characteristic of groups who are making their way in America. Their numbers are now so large that if they do not succeed, all of us will have diminished futures.

That is the new reality.

LONGITUDINAL ANALYSIS OF ADULT LEARNERS AND TRADITIONAL STUDENTS IN THE CALIFORNIA STATE UNIVERSITY SYSTEM

William J. Mason
Professor of Economics
San Francisco State University

Donald W. Fletcher
Executive Director
Commission on The Older, Part-Time Student
The California State University

Introduction

A comparative analysis of adult learners with traditional students in the California State University includes information on historical perspectives, personal characteristics, other characteristics, majors, student performances, and projected future developments. Adult learners were defined as students who were 25 years old and over while traditional students included enrollments below 25 years of age. The student population in this study included all matriculated students on the 19 campuses in the California State University. Extended education students were not part of the analysis.

Historical Perspective

Historically, adult enrollments increased from 61,232 in 1967 to 141,929 in 1987, or an increase of 132 percent. A rapid rise occurred from 1967 through 1975 while a relatively steady state existed from 1976 through 1984. However, a sharp increase in adult enrollments occurred during the past three years, with a growth from 122,943 to 141,929 enrollments. In conjunction with the increase in adult enrollments, the percent of adult enrollments to total enrollments increased steadily from 33 to 41.4 percent from 1967 through 1987. CSU campuses varied widely in their proportion of total enrollments consisting of adult learners. Overall, the range was 20.9 to 67.2 percent. Smaller campuses had the highest proportion of adult learners to total enrollments. To indicate the importance of the adult learner to the California State University, seven campuses had more adult learners than traditional students during Fall, 1987. It is clear that adult students have had the greatest impact on fluctuations in enrollments since 1971. Whether the change in enrollments from one year to the next was a decrease or an increase, there were more changes in the number of adult students than traditional students. In other words, adult students are not only driving the direction but also the magnitude of enrollment changes. It is also very clear that women accounted for the major changes in adult enrollments. Thus, one can conclude that adult women are playing the key role in fluctuations of enrollments in the California State University during the past eight years. While the number and percent of adult enrollments have both increased since 1967, the overall participation rates for selected age cohorts indicated a downward sloping trend line. Therefore, the increase in adult enrollments in the California State University was attributable to increasing population in each of the selected age cohorts for adult learners rather than increasing participation rates during the past ten years.

Personal Characterics

Age Distribution. The increase in enrollments from 1969 through 1975 was largely attributable to the 25-29 age cohort. However, there has been a decline and leveling off of enrollments from this age cohort since 1975. The number of enrollments from the 30-34 and 35 and over age cohorts leveled off from 1975 through 1984. Since then, enrollments in all these age cohorts have shown an increase.

Sex Composition. It is interesting to note that the number of adult women in each of the selected age cohorts has shown a consistent increase from 23,301 in 1967 to 74,184 in 1987. Enrollments of men increased from 37,931 to 79,491 from 1969 through 1975, primarily because of the return of the Vietnam veterans. They then began to decline in numbers through dropout or graduation of veterans until 1978. Then, the number of men remained relatively constant until 1985, when the male enrollments began to increase slightly. Unlike women, the number of men students from the 30-34 and 35 and over age cohorts has remained relatively stable during the past fifteen years. Contrary to conventional wisdom, women are in the majority among not only adult students but also traditional students in the California State University.

Ethnic Composition. The proportion of white to minority enrollments are about the same for adult learners and traditional students. Among the ethnic minorities, the three most prevalent ethnic groups among adult learners were Asian, Black, and Hispanic while Asian, Mexican American, and Black were the most numerous among traditional students. Among the minority ethnic groups, there were proportionately more American Indian, Black, and Hispanic among adult learners than among traditional students. Mexican American, Asian, and Filipino students were proportionaly less among adult learners. There were insignificant changes in the mix of whites and minorities from 1980 to 1987. Nevertheless, there was an increase in total enrollments of minorities from 1980 to 1987. The greatest increases occurred among Asians, Hispanics, Mexican Americans, and Filipinos. The relative proportion for each adult minority shifted toward more Asians, Hispanics, and Filipinos from 1980 to 1987 while Blacks, Mexican Americans, and Indians were not as well represented proportionately.

Other Characteristics

Basis of Admission. At the undergraduate level, a higher proportion of adult learners than traditional students were regular admits to the California State University. However, at the post-baccalaureate and graduate level, there was a higher proportion of adult learners than traditional learners who were special admits.

Enrollment Type. The typical adult learner was a part-time student while the traditional student was a full-time student, who is defined as a person who takes 12 or more student credit units. Among the undergraduate full-time students, the proportion of minorities to whites were approximately the same between the adult and traditional age cohorts. There were proportionately more American Indians, Blacks, and Hispanics among the undergraduate full-time adult learners while there more Mexican Americans, Asians, Pacific Islanders, and Filipinos among the traditional students. Among the undergraduate part-time students, the proportion of minorities to whites among adult learners were less than among the traditional students. There were proportionately more American Indians, Blacks, and Hispanics among the undergraduate part-time adult learners while there were more Mexican Americans, Asians, Pacific Islanders, and Filipinos among the traditional students.

Geographic Origin. The percentage of students whose geographic origin was California was slightly higher for adult learners than traditional students. Overall, about 85 percent of all students come from California.

Resident Status. For fee purposes, about 97 percent of adult and traditional students paid California residence rates.

Majors of Adult Learners

Which discipline areas have increased the most in the number of majors among adult learners from 1980 to 1987? They are business administration, communications, computer science and information systems, education, engineering, mathematics, and interdisciplinary studies. There were minimal changes among majors of adult learners in agriculture and natural resources, architecture and environmental design, biological science, fine arts, foreign languages, health sciences, home economics, letters, physical sciences, psychology, and public affairs. The discipline area with the greatest numerical decline was the social sciences. Adult female students have been increasingly choosing the traditional male discipline areas since 1980. The six discipline areas with the greatest numerical growth for women from 1980 to 1987 were interdisciplinary studies, business and management, computer and information systems, letters, communication, and engineering. In the meantime, the six disciplinary areas showing the greatest numerical increases for adult males were computer science and information systems, education, interdisciplinary studies, letters, communications, and social sciences.

Performance of the Adult Learner

Student Unit Loads. As one would expect, traditional students carried a significantly heavier unit loads than adult students. This was true for all class levels. Full-time freshmen adult students had a significantly higher mean unit load than traditional students while full-time adult learners at all other class levels had significantly lower mean unit loads. Among part-time students, the adult learners carried significantly lower unit loads than traditional students. Except at the post-baccalaureate and graduate level, full-time men adult students carried significantly higher unit loads than women at all class levels. Part-time men adult students also carried significantly higher unit loads at the freshmen, sophomore, and junior class levels while women had significantly higher unit loads at the senior class level. There were no differences in unit loads between men and women part-time adult students at the post-baccalaureate and graduate level.

Grade Point Averages. Contrary to conventional wisdom, an analysis of grade point averages for students who received baccalaureate degrees in 1986-87 indicated that traditional students had significantly higher grade point averages than adult students. Further analysis by ethnic origin showed that this held true for Mexican Americans, Hispanics, Asians, Whites, and Filipinos. However, the grade point averages for adults of Indian, Black and Pacific Islander ethnic origin were not significantly different from the traditional students. Grade point averages for all adult learners were significantly higher in 1986-87 than in 1979-80. Additional analysis by ethnic origin indicated that Blacks, Mexican Americans, Asians, Whites, and Pacific Islanders improved significantly while there were no significantl changes among the other ethnic groups.

Baccalaureate Degree Productivity. The number of baccalaureate degrees awarded since 1979-80 has remained relatively stable at approximately 44,000 per year. Degrees earned by traditional students have been declining slightly each year since 1980-81 while the number of baccalaureate degrees awarded to adult learners has been increasing slightly during the same time period. Since 1980-81, the proportion of total baccalaureate degrees awarded by the California State University to adult learners has increased from 43.4 to 58.7 percent. More baccalaureate degrees were earned in 1986-87 by adult women than adult men of Black, Mexican American, Hispanic, and White ethnic origin while adult men of Indian, Asian, Pacific Islander, and Filipino ethnicity were awarded more baccalaureate degrees than adult women. There were more baccalaureate degrees awarded during 1986-87 to adult learners in each ethnic group than to traditional students. Comparing the percentage change of baccalaureate degrees awarded from 1979-80 to 1986-87, there were greater increases for adult learners than traditional students of Indian, Mexican American, Hispanic, Asian, White, and Filipino ancestry while there were less relative losses for adult Blacks and Pacific Islanders.

Master's Degree Productivity. The number of Master's Degrees awarded in the California State University has been declining in recent years, not only for the traditional students but also for the adult learners. Master's Degrees are awarded primarily to adult learners. The proportion has been increasing from 92.4 to 98.3 percent during the past seven years. There were 736 Master's Degrees awarded in 1979-80 to traditional students and only 148 degrees in 1986-87. This decline occurrred among Blacks, Mexican Americans, Hispanics, and Whites. At the same time, Master's Degrees earned by Pacific Islander and Filipino adult students also declined while Master's degrees awarded to Indian, Black, Hispanic, and White adult students increased.

Projected Adult Enrollments

The projected California population of the age cohorts representative of the adult learners indicates that there will be increases through 1990 and then there will be a decline through the year 2000. Unless participation rates change, adult enrollments will continue to increase in the California State University until 1990 and than tail off until 2000.

ADULT LEARNERS: A CHALLENGE TO HIGHER EDUCATION

Joan T. Cobin, Center for Innovative Programs

Due to the changing demographics of the student population it serves, higher education in the United States has been and will continue, for the foreseeable future, to adjust the basic premise upon which its programs and services have been built. The full time, traditional age student, for whom universities were originally designed is barely in the majority. The social forces which are at work to create this change in the student bodies at institutions of higher learning include the rapid obsolescence of scientific knowledge, the change from a manufacturing to an information society, and a growing recognition of the relationship of learning to earning. These are among the forces which are sending adults back to school to complete or further their academic studies in unprecendented numbers. Higher education, therefore, needs to modify its programs and academic support services, which are designed primarily for traditional age students, to accommodate these adult students who bring their unique assests and needs to our campuses. That is the challenge.

California has been singular in its efforts to provide readily accessible higher education for its citizens. Nearly

30 years ago the California Master Plan for Higher Education was inaugurated. This plan integrated the three levels of public higher education into a tripartite system that created a point of access for all Californians who desired entry to postsecondary education. Recently, a state commission to reexamine the 1960 Master Plan completed its work and published its recommendations in a document entitled The Master Plan Renewed (1987). Among the recommendations, which reaffirm the role and mission of each of the segments of public higher education, (as well as identify new challenges commensurate with contemporary issues), is one that recognizes that the older and part-time student is a learner with special needs. The Commission noted that California's four year universities continue to reflect the assumptions of the 1960 Master Plan that college students are "ethnically homogeneous, well prepared recent high school graduates who would attend college on a full time basis."

While recognizing that all segments of public higher education in California must make accommodations to serve the changing student population, primary responsibility for serving the older and part-time student was entrusted to the California State University. In assigning this responsibility, recommendation number ten from The Master Plan Renewed includes the charge that "the role and mission statement of the university must be modified to contain a specific commitment to integrate such students and that the trustees shall make whatever organizational changes are necessary to carry out that commitment." It goes on to note that "where necessary admission standards should be adapted to account for the skills and experiences that are a better measure of success than out of date high school records."

From its inception the California State University was designated as the segment of higher education that would focus not only on excellence in teaching but also on providing access for community college transfer students through the mechanisms of course credit transfer and articulated programs. While it has never achieved all that is possible in these areas, the commission's recommendation gives the university a mandate to strengthen these processes to better serve students whose life roles demand a slower pace or a stop-out period in their pursuit of an academic credential. The California State University has initiated a process that will begin immediately, the outcome of which should markedly affect the status of older students prior to and after admission to the university. First some background information to put these new directions in perspective.

National Demographics

In 1985, the Institute for Educational Leadership published a study of education in the United States by Harold Hodgkinson. The author in presenting the study findings concluded that the interdependence among the various levels of education indicates that what we have in reality is "all one system." And it is, therefore, important for educators to be aware of and attend to what is occurring at all levels of education. The number of students served and the quality of education provided at one level eventually impacts on the nature of the programs offered at the next level.

The "baby boom cohort" which began working its way through the public educational system in the mid '40s will be at their peak of earning and, as trends indicate, learning power from now until the year 2000 when they will begin to retire. Recognition that it is this large segment of the population who are responding to the social forces alluded to earlier, that is, to remain viable in the job market, should cause educators to hasten to assess their institutional capability to accommodate to the needs of this demanding new student. This information coupled with the knowledge that the traditional age college student cohort (18-22 years) has decreased can only lead to agreement with Hodgkinson (1986) that "the adult population is the only growth component possible in higher education until about the year 2000." From this same study we learn it is true that nationally 50% of students enrolled in colleges and universities are over the age of 25 and that most of them are attending part-time. It is also true that industry is taking increasing responsibility to meet its own needs for a prepared work force. U.S. business and industry annually offers approximately 18 million courses to 10 million workers. Higher education has not yet attracted the majority of adult learners to its programs.

It is evident from the Hodgkinson report that fewer and fewer students are completing their degree programs in the prescribed four years. Only 46% graduate within that time period. Given 6 years a 60% graduation rate is observed. These data contribute to the growing recognition that most drop-outs are really stop-outs. Stop-outs are defined as those students who have life tasks to attend to other than school. Planners for institutions of higher learning would show foresight in developing strategies that assist the student who must stop-out to return to the university in a dignified and facilitative manner at a later date. The recruitment strategies of public higher education will need to be restructured to attract not only the high school senior but the adult learner who must typically remain in the workforce while attending school.

California State University (CSU)

The California State University which is known as the largest system of senior higher education in the country, serving well over 350,000 students, is an example of an institution where change is indicated. It has a degree completion rate of well below the national norm of almost 50% in five years. It graduates only 29% in that time and another 11-14% at a later date (Hodgkinson, 1985).

A 1987 study completed by William Mason for the CSU Chancellors Office Division of Research and Development provide data which support the aforementioned statistics. CSU data indicate that presently 43% of the total enrollment is over 25 years of age with a range of 20% to 65% of enrollment across the 19 campuses. The majority of these students are women (over 30) who are increasingly enrolling in traditionally male disciplines. It was noted that this trend began over 20 years ago and is expected to continue through the year 2000 and then decline slightly.

A further study was conducted in 1988 by the CSU Chancellors Office Department of Analytic Studies titled Time to Degree. It concluded that both student and university factors affect the length of time it takes a student to complete a degree program. The two "student controlled" factors were determined to be the need to combine school and employment and a reduced study load per semester. "University factors" contributing to the time extension were found to be; difficulties in enrolling both in major and general education courses by individual students.

These two studies of a specific university system corroborate the national trends. It would seem that the time for a systematic review of the existing policies and practices that govern the development and delivery of programs and services for serving the current student population is long overdue. The recommendations contained in the Master Plan Renewed provide the impetus for public higher education in California to engage in such a process of self assessment.

Characteristics of the Adult Learner

Before turning to a discussion of ways to structure university activities to better serve the emerging adult student population, it would do well to review the characteristics of this "new" student.

In a paper prepared for the Commission on Higher Education and the Adult Learner (1983), Arthur Chickering defined the adult learner as "an individual whose major life role is something other than full time student." When educators plan programs and services within the context of this definition, the emphasis is not merely on the age or the time commitment of the student but on the interaction between the mission of the institution and the individual. When considered from this point of view, designing programs goes beyond mere tinkering with time and location when scheduling classes.

A number of authors have written about the characteristics of the adult as a learner. Sheckley (1982) begins his discussion by pointing out that diversity is the most distinctive and common trait present in any group of adults enrolled in or seeking enrollment in a university program. They are widely diverse in "learning styles, motivation for learning, life transitions, life roles, learning goals, developmental tasks, prior experience and patterns of participation in formal education." The challenge for higher education is to systematically assess and then modify existing institutional programs and services which were orginally designed for traditional age students.

To successfully meet this challenge it is important that university faculty come to know that this heterogeneous older and primarily part-time student population is made up of individuals who are goal directed and looking for learning that has immediate applicability. They are proven learners with unique learning styles who will continue to learn throughout their life cycle. They are motivated by life events to learn, they perceive themselves as independent decision makers. It would be a worthwhile exercise for those who work with adults in an educational environment to pause and reflect on their own assumptions about the characteristics of adult learners. Do they differ or are they similar to those described above? If they are more or less the same, what are our obligations as educators to foster institutional changes that will promote access for this population? And further what new institutional programs and what new skills do we need to assure success once they have entered academia?

Facilitating Access and Success

After first coming to understand the characteristics of adult student populations, the next step for university faculty and administrators to take to address these questions is one that will not only facilitate the access of adults who have stopped-out or never entered higher education, but will also increase the potential for their success once admitted. This step requires that a full understanding of and a sensitivity to the barriers that could deter an individual student's admission and progression be acquired. According to Patricia Cross (1981), these barriers fall into three categories; institutional, situational and personal.

Institutional barriers include those admission policies and procedures that may limit or deny transfer of credit from other institutions. They also include policies which limit opportunity for assessment and recognition of prior learning gained either through formal non-transferable courses of study or informal learning experiences. Once admitted, as demonstrated in the CSU study of Time to Degree, class scheduling as well as access to services such as academic advisement, counseling, library, bookstore, and administrative services may be barriers to retention, progress and ultimate success. Situational and personal barriers may be experienced by all students but they are more prevalent among adult learners due to the diversity and complexity of their life roles and responsibilities. In addition, the long absence from the classroom environment often evokes in adult learners feelings of inferiority or a lack of self-confidence with respect to their performance in the role of student. University services and programs designed for younger, full-time students, who typically are involved in a variety of supportive group activities, need to be adapted to the adult. The adult student will have a very different campus life experience than a traditional age student. It can be one that is very alienating and isolating for them unless educators are willing to rearrange activities to make them feel that they belong and that they do matter. Again educators concerned with adults as learners would profit from reviewing personal observations or experiences to determine what change is needed on our campuses. A further question is, what activities can we undertake individually to bring attention to these issues?

Once the barriers are understood, concerned faculty can foster a proactive process that identifies and then modifies policies and procedures which contribute to the inability of adult students to both gain access and to make reasonable progress towards their educational goals once admitted to the university.

Both access and success for the adult student can be facilitated by systematically designed academic programs, program planning that includes attention to support services, as well as the course of instruction. This process commences, as we have noted, with a comprehensive review of the characteristics of the learner population. From this kind of review a fairly definitive list of admission competencies (both required and desired) can be established. Adults who typically are not recent high school graduates should be provided options to either obtain or demonstrate, in an alternative manner, the desired admission competencies. Student services to make these options available need to be carefully planned and initiated.

In addition to clearly stating required admission competencies, contemporary educators are coming more and more to recognize that there should also be an agreed upon set of measurable outcome competencies required for degree completion. These decisions regarding program outcomes along with the entrance competencies become a framework within which the course content, unit requirements, course sequence and other graduation requirements can be established.

The mechanics of program delivery are determined depending upon the nature and location of the student body, the desired learning outcome and the teaching style of the instructor. New technologies have made it easier to serve non-traditional students at a distance from campuses. They offer flexibility and opportunities for creativity to the teacher of on-campus students as well. Innovative teachers are finding that when instructional planning is learner centered activities can be structured to individualize a program of study to accommodate a diverse student population.

Through the feedback gained from ongoing evaluation, educators who have planned programs that build upon the unique assets and needs of the students will find that periodic program adjustments can be made to enhance the satisfaction of both learner and teacher. Simply stated, teachers who use a systematic approach to program design and delivery, know who are the students, what they are to achieve, and how they will know when it has been achieved. It has been noted by Knowles (1980) the self-motivated adult learner will thrive in this kind of learning environment. To facilitate this approach by faculty we need to ask: What mechanisms exist to recognize those who already design courses and plan instruction that takes the diverse characteristics of the learner into account? What can be done to motivate others to assess their own teaching style and to recognize the impact on their students?

Teacher Student Relationship

It is well known that faculty, as gatekeepers to institutions of higher education, are ultimately responsible for establishing and maintaining academic standards. To this end it is important that they be actively involved in establishing the policies and practices that govern the institution. To successfully carry out these functions they need to be informed of the changing demographics of the student body and the implications for institutional change. The faculty of the California State University for example take pride in an ongoing quest for excellence in teaching. Given the nature of the present and future student body, the questions they must now ask themselves are, have the standards for defining and measuring excellence changed? And if so, how can the university and its faculty adapt their practices to these new standards?

Faculty who individually and collectively plan and design academic programs in the systematic manner described previously will know the answer to the latter question because the process itself provides continual opportunity for feedback and program modification. Feedback from ongoing evaluation alerts faculty to the level and quality of goal attainment that is occuring. These faculty no doubt already have or are in the process of making changes to accommodate the older student.

Beyond responsibility for institutional and departmental planning and oversight faculty in general seek their personal satisfaction from their interaction with students. The ever increasing age of the students who are enrolling in their courses is cause for them to reflect on the nature of the relationship. It is within the context of this relationship that the challenge of the adult learner becomes most evident.

We have learned that the most consistent descriptor of an adult student population is their diversity. This factor alone makes it difficult to plan learning experiences using the old assumptions. These assumptions led to expectations that any given class was generally homogeneous with respect to age and experience.

In a contemporary higher education environment it is not unusual to have a thirty year age span among students. Along with their age differences these students come to class with widely diverse outcome expectations for the learning experience. The older the students, the greater the range will be for their living and learning experiences. These life experiences in turn affect their style and motivation for learning. The older student is more likely to view the teacher as a peer in a collaborative relationship to achieve their individual goals. Teachers, therefore, would do well to take stock of their teaching philosophy and style in preparation for the challenge of today's student.

Conti (1985) has written of the process of assessing learning style for teachers of adults. His studies led him to the conclusion that teaching style affects the level of student achievement and that it is, therefore, important for faculty to comprehend their own style. He further found in his work that adults favor a collaborative teaching style. This style of teaching is process oriented and puts emphasis on what the learner is doing as opposed to what the teacher does. He defines teaching style as a set of behaviors which are consistent though the content may change. It is in fact the operational behavior of the teachers educational philosophy. In other words what teachers believe about education becomes apparent through their teaching behavior. In an attempt to put his findings about the relationship between teaching style and student achievement into perspective for relating to adults, Conti devised the Principles of Adult Learning Scale (PALS). The instrument, which incorporates principles that are advanced in the literature, can be quickly self administered and scored. He concludes that through an analysis of the seven factors covered in the test a teacher can gain a clearer understanding of their classroom behavior. If, as has been suggested by Knowles and others, the teacher is the most important variable in influencing the nature of the learning environment, then it becomes essential that faculty using this or some other measure take the time to examine their own philosophy and style. The results should be considered in the context of what is known about the characteristics of the older student who they are increasingly expected to serve.

Asking faculty to consider their teaching style and its impact on student achievement will come to naught, however, if the university does not make the resources available to assist them experiment with new modalities. They need opportunities to work and study with colleagues to learn the magnitude of the impact adults are making on university enrollment and to discover together alternative instructional delivery methods that maintain excellence while accommodating to the changes brought about by a more diverse student population. This information calls for innovative faculty development programs to be made available without delay. The individual California State University campuses have initiated a variety of faculty development activities which are administratively endorsed by the Chancellors Office. The need is to expand these efforts through systemwide initiatives that provide direction and resources.

New Directions

The Master Plan Renewed document provided in its recommendations the impetus to not only consolidate existing programs that support the adult learner but to chart new directions as well. The CSU Chancellor has established a distinguished commission on the Older and Part-Time Student (OPTS) to study the recommendations contained in Master Plan Renewed. Its charge is to review California State University policies, programs, and organization and then make recommendations to the Chancellor. These recommendations should include goals and a plan for achieving the goals. They are asked to recommend specific changes in policy, funding, and organization with respect to the older and part-time student's recruitment, access, needed support services, instructional delivery and faculty development.

Each of these areas that the California State University Commission on Older and Part-Time Student is being asked to address has been identified in the foregoing discussion. They are relevant to all of higher education as it copes with the challenge posed by the large number of adults returning to school for advanced degrees.

Morris Keeton, President of the Council on Adult and Experiential Learning (CAEL), alerts us that the world of work with its ever growing need for educated employees has precipitated an altered relationship between higher education and the students it serves. He has noted that in the past most students were a one time client of the university going straight through from entry to graduation. That relationship has changed for many students to one of multiple contacts with higher education throughout their life span. National and some local demographics pertaining to adults returning to school have been referred to that support his belief. It has been shown that one public institution in California has accepted the mandate to look for innovative ways to affect institutional and faculty change. Change that will provide appropriate educational programs for the present day student population which has emerged as a result of very real social forces. It can only be hoped that this same process is going on in numerous other universities throughout the country. The challenge to all educators is to personally engage in activities to ensure that it will.

Bibliography

Center for Innovative Programs. (1987). Adult learning education system. Long Beach, CA: author.

Chickering, A. W. (1983). Adults as learners. Unpublished manuscript prepared for the Commission on Higher Education and the Adult Learner.

Commission for the Review of the Master Plan for Higher Education. (1987, July). The master plan renewed. Sacramento: author.

Conti, G. J. (1985, June). Assessing teaching style in adult education: How and why. Lifelong learning, 8(8).

Cross, K. P. (1981). Adults as learners. San Francisco: Jossey-Bass.

Hodgkinson, H. L. (1985). All one system: Demographics of education--kindergarten through graduate school. Washington, D.C.: Institute for Educational Leadership, Inc.

Hodgkinson, H. L. (1986). California: The state and its educational system. Washington, D.C.: Institute for Educational Leadership, Inc.

Knowles, M. S. (1970). The modern practice of adult education: From pedagogy to andragogy. Chicago: Follett.

Knowles, M. S. (1980). The modern practice of adult education: From pedagogy to andragogy (2nd ed.). Chicago: Follett.

Mason, W. J. (1988, March). The adult learner in the CSU. Paper presented at the meeting of the Board of Trustees, Chancellor's Office, The California State University, Long Beach, CA.

Robb, P. S. (1988). Factors effecting the time to degree. Report prepared by the California State University Chancellors Office, Analytic Studies Department.

Sheckley, B. G. (1982). The adult as learner: A case for making higher education more responsive to the individual learner. CAEL News, 7(8), 8(1).

Appendix E
Bibliography

The Adult Learner: Research and Implications

Andrews, T. E. (1981). *Adult learners: A research study.* Washington DC: Association of Teachers and Educators.

Beder, H. W., & Darkenwald, G. G. (1982). Differences between teaching adults and pre-adults: Some propositions and findings. *Adult Education, 33* (3), 142-155.

Brookfield, S. D. (1986). *Understanding and facilitating adult learning*. San Francisco: Jossey-Bass.

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass.

Davenport, J. III, and Davenport, J.H. (1985, September) Andragogical-pedagogical orientations of adult learners: Research results and practice recommendations. *Lifelong Learning,* 9 (1). 6-8.

Houle, C. O. (1982). Three kinds of lifelong learners. In R. Gross (Ed.), *Invitation to lifelong learning.* Chicago: Follett.

Houle, C. O. (1984). *Patterns of learning.* San Francisco: Jossey-Bass.

Jarvis, P. (1983). *Adult and continuing education*. New York: Nichols.

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2nd ed.). Chicago: Follett.

Krupp, J. A. (1982). *The adult learner: A unique entity*. Manchester, CT: Adult Development and Learning.

Long, H. B. (1980). *Adult learning*. New York: Cambridge.

Merriam, S. B., & Simpson, E. L. (1984). *A guide to research for educators and trainers of adults*. Melbourne, FL: Krieger.

Peterson, D. A. (1983). *Facilitating education for adult learners.* San Francisco: Jossey-Bass.

Schlossberg, N. K. Lynch, A. Q., and Chickering, A. W. (1989). *Improving higher education environments for adults.* San Francisco: Jossey-Bass. 1-5, 20-21.

Sheckley, B. G. (1984). The adult as learner: A case for making higher education more responsive to the individual learner. *CAEL News*, 7(8), 8(1).

Thomas, R. & Chickering, A. W. (1984). Education and identity revisited. *Journal of College Student Personnel. 25*, 392-399.

Development of Adult Learners

Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1987). *Women's ways of knowing*. New York: Basic Books.

Bridges, W. (1980). *Transitions: Making sense of life's changes*. Reading, MA: Addison-Wesley.

Center for Innovative Programs. (1989). *Transition: An interview with William Bridges*. Profiles in Adult Learning Videotape Series. Long Beach, CA: Center for Innovative Programs.

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass.

Knox, A. B. (1977). *Adult development and learning: A handbook on individual growth and competence in the adult years*. San Francisco: Jossey-Bass.

Kolb, D. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice-Hall.

Marienau, C., & Chickering, A. W. (1982, June). Adult development and learning. In B. Menson (Ed.), *New Directions for Experiential Learning: Building on Experiences in Adult Development, No. 16*. San Francisco: Jossey-Bass.

May, R.G. (1981) *Adult development a la Piaget*. (Report No. CE-028-261). (ERIC Document Reproduction Service No. ED 199 472.

Menson, B. (Ed.) (1982). *New directions for experiential learning: Building on experiences in adult development, No. 16*. San Francisco: Jossey-Bass.

Ross, D. B. (1984). A cross-cultural comparison of adult development. *Personnel and Guidance Journal*. (62), 7, 418-421.

Schlossberg, N. K. (1984). *Counseling adults in transition*. New York: Springer.

Sheckley, B. G. (1985). The individual adult learner and developmental program design. *CAEL News*, 8(5).

Stevens-Long, J. (1979). *Adult life: Developmental processes*. Palo Alto, CA: Mayfield.

Tough, A. M. (1982). *Intentional changes: A fresh approach to helping people change*. Chicago: Follett.

Venable, W. R. (1986). *Younger and older learners together*. National Teleconference Broadcast via Satellite. Oklahoma State University.

Educational Needs of Adult Learners

Brookfield, S. (1986). *Adult learners, adult education, and the community*. New York: Teachers College, Columbia University.

Center for Innovative Programs. (1989). *Mainstreaming: An interview with Carol Aslanian*. Profiles in Adult Learning Videotape Series. Long Beach, CA: Center for Innovative Programs.

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass.

Darkenwald, G. G., & Merriam, S. B. (1982). *Adult education: Foundations of practice*. Scranton, PA: Harper & Row.

Darkenwald, G., & Knox, A. B. (Eds.). (1985). *New directions for continuing education*. San Francisco: Jossey-Bass.

Petersen, R. E. (1979). Present sources of education and learning. In R. E. Petersen, et al. (1979) *Lifelong learning in America*, San Francisco: Jossey-Bass.

Peterson, D. A. (1983). *Facilitating education for adult learners.* San Francisco: Jossey-Bass.

Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving higher education environments for adults*. San Francisco: Jossey-Bass.

Schlossberg, N. K., & Warren, B. (1985). *Growing up adult: Reactions to non-traditional learning experiences*. Columbia, MD: Council for the Advancement of Experiential Learning (CAEL).

Module 3

Support Services

Adams, W. W. (1986). *Research summaries on the educational development of adults: Making the commitment to return to school and managing learning.* Charleston, WV: Appalachia Educational Laboratory.

American Council on Education, Commission on Higher Education and the Adult Learner (1984). *Postsecondary institutions and the adult learner: A self-study assessment and planning guide.* Washington, DC: American Council on Education.

Apps, J. W. (1981). *The adult learner on campus: A guide for instructors and administrators.* Chicago: Follett Publishing.

Center for Innovative Programs. (1989). *Advocating learner empowerment through the challenge of institutional practice: An interview with George Pruitt.* Profiles in Adult Learning Videotape Series. Long Beach, CA: California State University Center for Innovative Programs.

Center for Innovative Programs. (1989). *Full participation: Higher education responds: An interview with Arthur Chickering.* Profiles in Adult Learning Videotape Series. Long Beach, CA: The California State University Center for Innovative Programs.

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning.* San Francisco: Jossey-Bass.

Cullinane, M., & Williams, D. (1983). *Life, career, educational planning: A facilitator's manual.* Suffern, NY: Rockland Community College.

Daloz, L. A. (1987). *Effective teaching and mentoring.* San Francisco: Jossey-Bass.

Di Silvestro, F. R. (Ed.). (1981). *Advising and counseling adult learners.* San Francisco: Jossey-Bass.

Knefelkamp, L., Widick, C., & Parker, C. (Eds.). (1978). *New directions for student services: Applying new developmental findings.* San Francisco: Jossey-Bass.

Knox, A. B. (1986). *Helping adults learn: A guide to planning, implementing, and conducting programs.* San Francisco: Jossey-Bass.

Lynch, A. Q., Doyle, R. J., & Chickering, A. W. (1984). *Higher education for adult mental health: Model programs, professional development and institutional change to serve adult learners.* Memphis, TN: Memphis State University, Center for the Study of Higher Education.

Miller, J. (Ed.). (1987). *New directions for continuing education: Issues in adult career counseling, No. 32*. San Francisco: Jossey-Bass.

Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving higher education environments for adults*. San Francisco: Jossey-Bass.

Schlossberg, N. K., Troll, L., & Leibowitz, Z. (1986). *Perspectives on counseling adults: Issues and skills*. Melbourne, FL: Krieger.

Shriberg, A. (Ed.). (1980). *Providing student services for the adult learner*. San Francisco: Jossey-Bass.

Steltenpohl, E., & Shipton, J. (1986). Facilitating a successful transition to college for adults. *Journal of Higher Education*, 57(6), 637-658.

Tough, A. (1982). *Intentional change: A fresh approach to helping people change*. Chicago: Follett.

Walter, T., & Siebert, A. (1982). *The adult student's guide to success in college.* New York: Holt, Rinehart, & Winston.

Warren, D.A. (Ed.) (1986). *Improving institutional services for adult learners.* Washington, DC: The American Council on Education, Commission on Higher Education and the Adult Learner.

Warren, W. H. (1986). *Adult learners: Impetus for change*. Washington, DC: The American Council on Education, Commission on Higher Education and the Adult Learner.

Winston, R. B., Miller, T. K., Enders, S. C., Grites, T. J., & Associates. (1984). *Development academic advising: Addressing student educational, career and personal needs*. San Francisco: Jossey-Bass.

Prior Learning Assessment

American Council on Education. (1986). *Guide to education credit for training programs*. Washington, DC: American Council on Education.

American Council on Education. (1986). *Guide to the evaluation of education experiences in the armed services*. Washington, DC: American Council on Education.

American Council on Education. (1987). *Guide to educational credit by examination*. Washington, DC: American Council on Education.

Brod, D., Keogh, R. & Walker, D. (1985). *Reflection: Turning experience into learning*. New York: Kogan Page, London Publishing Company.

Dewees, J. (Ed.). (1986, December). *The assessment of prior learning: A critical adult learner service*. Athens, OH: Adult Learner Services.

Knapp, J., & Sharon, A. (1975). *A compendium of assessment techniques*. Princeton, NJ: Cooperative Assessment of Experiential Learning.

MacTaggart, T. (Ed.). (1983). *New directions for experiential learning: Cost-effective assessment of prior learning*. San Francisco: Jossey-Bass.

Martorana, S. V., & Kuhnes, E. (Eds.). (1979). *New directions for experiential learning: Transferring experiential credit*. No. 4. San Francisco: Jossey-Bass.

Meyer, P. (1975). *Awarding college credit for non-college learning*. San Francisco: Jossey-Bass.

Moon, R. C., Jr., & Hawes, G. R. (Eds.). (1980). *New directions for experiential learning: Developing new adult clienteles by recognizing prior learning, No. 7*. San Francisco: Jossey-Bass.

New York Regents. (1982). *Guide to educational programs in noncollegiate organizations*. Albany: The University of the State of New York.

Rydell, S. (1982). *Creditable portfolios: Dimensions in diversity*. Columbia, MD: Council for Adult and Experiential Learning (CAEL).

Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving higher education environments for adults*. San Francisco: Jossey-Bass.

Warren, J. & Breen, P. W., (1984, July). *The educational value of portfolio and learning contract development*. Council for the Advancement of Experiential Learning (CAEL).

Instructional Delivery Options

Buttedahl, P. C. (1983, June). Communications technology and adult education: Can participation be encouraged? *Lifelong Learning*, 6, 4-5.

Center for Innovative Programs. (1989). *Learning is Where You Find It: A New Instructional Bandwidth: An interview with Dee Brock*. Profiles in Adult Learning Videotape Series. Long Beach, CA: California State University Center for Innovative Programs.

Chamberlain, M. N. (Ed.). (1980). *New directions for continuing education: Providing continuing education by media and technology*. San Francisco: Jossey-Bass.

Cranely, C. K. (1986). *Guidelines for creating and supervising distance education courses*. Sudbury, Ontario: Laurentian University.

Feasley, C. E. (1983). Serving learners at a distance: A guide to programs and practice. In *ERIC Higher Education Research Report, No. 5.* Washington, DC: Association for the Study of Higher Education.

Grossman, D. M. (1987). *Hidden perils: Instructional media and higher education.* Washington DC: National University Continuing Education Association.

Jenkins, J. (1981). *Materials for learning: How to teach adults at a distance.* Boston: Routledge and K. Paul.

Kaye, A., & Rumble, G. (1981). *Distance teaching for higher and adult education.* London: Croon Helm.

Johnstone, J. (1986). *Electronic learning: From audiotape to videodisc.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Kemp, J. E., & McBeath, R. J. (1980). *Types of self-paced learning programs.* Long Beach, CA: Office of the Chancellor, California State University and Colleges.

Lewis, R. J. (1985). *Faculty perspectives on the role of information technologies in academic instruction.* Washington, DC: Corporation for Public Broadcasting.

McIntosh, D. K. (1984, August). Interactive distance learning technologies. *Educational and Industrial TV*, pp. 47-48.

Neil, M. W. (1981). *Education of adults at a distance.* New York: Nichols.

Ricobono, J. A. (1986). *Instructional technology in higher education: A national study of the educational uses of telecommunications technology in American colleges and universities.* Washington, DC: Corporation for Public Broadcasting.

Self-Directed Learning

Brookfield, S. (1986). *Understanding and facilitating adult learning.* San Francisco: Jossey-Bass.

Keeton, M. T. (1976). *Experiential Learning*. San Francisco: Jossey-Bass.

Kemp, J. E. (1977). *Instructional design. A plan for unit and course development*. Belmont, CA: Fearon.

Knowles, M. S. (1975). *Self-directed learning.* New York: Association Press.

Long, H. B, (Ed.). (1988). *Self-directed learning: Application and theory..* Athens, Georgia: Adult Education Department, University of Georgia.

Merriam, S. B., (Ed.). (1982). *New directions for continuing education: Linking philosophy and practice No. 15.* San Francisco: Jossey-Bass.

Smith, R. M. (1982). *Learning how to learn: Applied theory for adults.* New York: Cambridge.

Steltenpohl, E., & Shipton, J. (1986). Facilitating a successful transition to college for adults. *Journal of Higher Education*, 57(6), 637-658.

Experiential Learning

Center for Innovative Programs. (1989). *Theory applied: New contexts for experiential learning: An interview with Leah Harvey.* Profiles in Adult Learning Videotape Series. Long Beach, CA: California State University Center for Innovative Programs.

Center for Innovative Programs. (1989). *Working smarter: The full wisdom of experience : An interview with Barry Sheckley.* Profiles in Adult Learning Videotape Series. Long Beach, CA: California State University Center for Innovative Programs.

Gilley, J. W. & Dean, R. L. (1985). Instructional design using content and experience: A model. *Performance and Instruction Journal*. 20-24.

Keeton, M. T., & Tate, P. (1978). *New directions for experiential learning: No. 1.* San Francisco: Jossey-Bass.

Kolb, D. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice-Hall.

Long, H. B. (1983). *Experience and education*. New York: Cambridge.

Sheckley, B. G. (1986). *Adult experiential learning: A grasping and transforming process.* Unpublished manuscript.

Thiagarajan, S. (1980). *Experiential learning packages.* Englewood Cliffs, New Jersey: Educational Technology.

Strategies for Teaching Adults

Apps, J. W. (1981). *The adult learner on campus: A guide for instructors and administrators.* Chicago: Follett Publishing.

Center for Innovative Programs. (1989). *Facilitating adult learning encounters: An interview with Stephen Brookfield.* Profiles in Adult Learning Videotape Series. Long Beach, CA: California State University Center for Innovative Programs.

Center for Innovative Programs. (1989). *Strategies for Instructional Development. A Resource and Planning Guide.* Long Beach, CA: California State University Center for Innovative Programs.

Conti, G. J. & Welborn, R. B. (1986, June). Teaching-learning styles and the adult learner. *Lifelong Learning.* 9(8), 20-24.

Draves, W. A. (1984). *How to teach adults.* Manhattan, KS: Learning Resources Network.

Meyers, C. (1986). *Teaching adults to think critically: A guide for faculty in all disciplines.* San Francisco: Jossey-Bass.

Mohrman, K. (1985). *Adult students and the humanities: An analysis of new data.* Washington, DC: Association of American Colleges.

Rosenblaum, S. H. (1985). *New directions for continuing education: Involving adults in the educational process, No. 26.* San Francisco: Jossey-Bass.

Smith, R. M. (1982). *Learning how to learn.* New York: Cambridge.

Smith, R. M. (Ed.). (1983). *Helping adults learn how to learn.* San Francisco: Jossey-Bass.

Sweeney, C. (1988, June). *Adult learning, adult learning styles, and critical thinking: The impact on the university classroom.* Los Angeles: California State University School of Education.

Wlodkowski, R. J. (1985). *Enhancing adult motivation to learn.* San Francisco: Jossey-Bass.